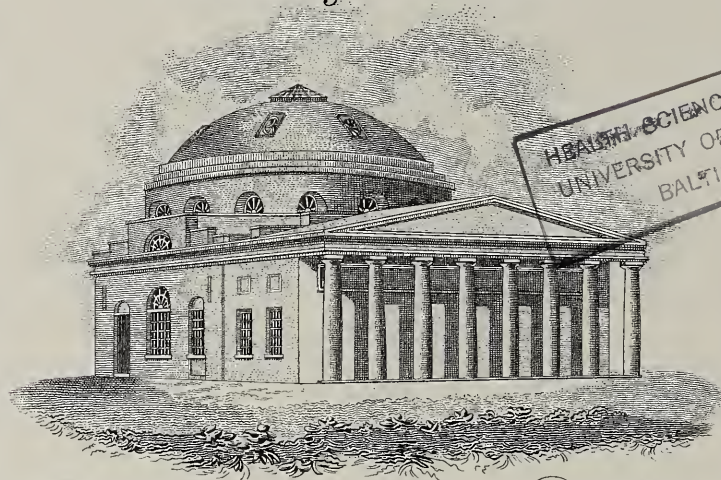


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THE JOURNAL

OF THE

Indiana State Medical Association

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION
OF INDIANA

Issued Monthly

Under the Direction of the Council

ALBERT E. BULSON, M.D.
Editor and Manager

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VOLUME XXI

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NUMBER 1

ORIGINAL ARTICLES

DIABETES

FROM THE STANDPOINT OF THE OTOLARYNGOLOGIST

JOSEPH C. BECK, M.D.
CHICAGO

In approaching this subject of Diabetes, as indicated on the program, the specialist finds himself in this position: He is not supposed to have much knowledge on the subject of diabetes, and he is looking to the internist or the medical man for help always when the question comes up in any case of diabetes.

There are two sides of the question that are of interest to the otolaryngologist. First, the conditions about the ear, nose, throat and mouth, conditions that are either caused by the diabetic condition or that may influence the condition that exists. That is a question that is always before us.

At the time when operations were being done, especially by otolaryngologists, without the examinations which are now required by all hospitals preliminary to the admission of the patient for such operations as tonsils or septum, there were undoubtedly complications due to diabetic conditions that the specialist was not entirely responsible for, or rather, he was not acquainted with the general condition. That, I am glad to say, is not seen so frequently now. And yet there are, in the practice of busy general practitioners, patients who do not have such rigid examination who come for operation and are operated on, and after the operation it is found that a diabetic condition existed, or some hyperglycaemic condition that interferes with the recovery of the diabetic patient.

During the last year I read a paper on this subject, and there are so many points that I can make clearer by reading part of that paper, that I will take the liberty of doing so rather than speaking at random.

As focal infection has assumed such a prominent role in the field of medicine, and as the ear, nose and throat are so frequently the site of the offending infection, their importance as etiologic factors in diabetes cannot be overrated, especially since

they influence the general condition of the patient. It has frequently been observed that the response of a diabetic patient to a dietetic or insulin regimen is never as good in the presence of infection. The tendency toward acidosis is especially pronounced, and it is a matter of everyday observation during the pre-insulin period that acidosis progressing to death not infrequently occurs during the lighting up of an acute process. Woodyatt, Allen, von Noorden and Wilder have stressed the importance of focal infection residing in the teeth, tonsils and paranasal sinuses. Their collective opinion, based on their large clinical experience, is that these infections have a decided influence on the disease, and that even partial eradication of these foci will promptly show better and more lasting results.

The staff of one of the largest sanitariums in the Middle West insists on the thorough removal of all foci of infection when there is the slightest evidence of their existence in the structures mentioned. We are awaiting their report with interest, especially since it affects the incidental mortality and morbidity consequent to otorhinolaryngologic operations. In the past, operative procedures on diabetic patients were performed with fear and trepidation, owing to the ever-present spectre of acidotic coma and poor union of the wound. This, however, has now been changed, thanks to the discoveries of Banting and his co-workers. The diabetic patient is immediately placed under the supervision of an internist, who directs the preoperative and postoperative care and supervises the administration of insulin, which has engendered such radical changes in the operative approach to a diabetic patient.

A little over a year ago, Hempstead and Adams published a comprehensive report from the Mayo Clinic regarding conditions of the ear, nose and throat complicating diabetes. Briefly, they reviewed 416 diabetic cases observed during a period of thirty-one years. Of this number, 141 of the patients had complications of the ear, nose or throat, and in sixty-two cases operative intervention was necessary.

Of the many isolated articles dealing with the relationship of otorhinolaryngologic diseases to diabetes, few are of great value, especially from a therapeutic standpoint, as for the most part they

*One of the papers of a symposium presented at the annual session of the Indiana State Medical Association, Gary, September, 1928.

concern the preinsulin period. Recently, however, Galloway, of Chicago, and Seydell, of Wichita, have contributed two valuable papers which deal with the subject of mastoiditis in diabetes. Galloway stresses the value of insulin and its influence on the course of a mastoiditis complicating diabetes. Seydell reports on the condition of the facial nerves in diabetic mastoiditis.

During a period of twenty-five years we have observed a series of seventy-four cases associated with diabetes in the proportion shown in the following table:

VARIOUS DISEASES ASSOCIATED WITH DIABETES	
Disease	Cases
Furunculosis of nose and ear.....	4
Deviated septum and hypertrophic turbinates.....	12
Suppurative rhinosinusitis.....	6
Chronic tonsillitis	
(a) with fetor exoris.....	12
(b) without fetor exoris.....	19
Chronic indurative laryngitis with attacks of oedema.....	3
Acute otitis media and mastoiditis.....	9
Chronic otitis media.....	5
Labyrinthitis and intracranial complication.....	4
	—
Total.....	74

Sixty-four of the patients mentioned in the table were observed prior to the use of insulin and ten afterward. Of the sixty-four cases in the first period, operative intervention was instituted in eleven; nine of acute mastoiditis, one of frontal lobe abscess consequent to a chronic frontal sinusitis, and one of peritonsillar abscess. No deaths occurred in this series, and local anaesthesia was used as much as possible. Postoperative acidosis occurred in most cases, but was mild, responding to a dietetic regimen. Operative intervention was instituted in four of the ten cases observed during the insulin period. Here we had the advantages of cooperation from the internist who had complete control of the general management of the patient. We urge the necessity for cooperation with an internist qualified in this field; he should have entire charge of the diagnosis and treatment for the diabetic condition, and should assume the responsibility of indicating and assuring the otolaryngologist of the safety of operating. With this procedure, we are enabled to operate not only in patients usually classed as surgical emergencies, but also in those of a more elective nature.

Since the advent of insulin we have materially changed our conception of what constitutes good surgical judgment in patients with acute processes complicated by acidosis or coma. Confronted with a case of fulminating mastoiditis or acute suppuration in the maxillary sinus associated with marked acidosis or even with coma, we immediately administer insulin buffered by dextrose solu-

tion, under the direct supervision of our internist, so as to reduce the acidosis and to bring the patient out of coma. Then, under local anaesthesia, a quick opening is made into the site of retention, the more radical measures being postponed until later.

I think that the medical men, particularly the experts in diabetes, are more and more warning the surgeons, especially the specialists (who are continually being wrongly accused) against any neglect in the examination of their patients, and I think they are right—we should be as thorough as possible. Dr. Woodyatt, one of the experts on diabetes in our city, recently expressed himself in regard to a patient my associate had, a boy nine or ten years of age, with an antrum reeking with pus. The patient was looking septic and showed other symptoms, after laboratory examination, that he was absorbing a great deal of this toxic material from the antrum, so Dr. Pollock said he would puncture the antrum, even though he knew that it was against Woodyatt's advice, but before doing so he would call up and see what Woodyatt said about it. Dr. Woodyatt said, "Do you wish to kill that patient by making a puncture of the antrum? He will go into coma from which we will probably have difficulty to rouse him." I quote that as an example of the extreme care these men take in surgical intervention. Dr. Woodyatt knew this patient's diabetic condition, and that even such slight trauma as that, though the patient was absorbing pus, would be worse than to allow the pus to remain. To my mind, I think it is a little exaggerated, but still it bears on the point I want to make, that if a patient is not properly prepared and is not a good surgical risk, it is far better to take a chance on the other side. At this time when tonsils are being removed for everything, I believe some even claim that diabetes is due to tonsillar infection. I do not make that claim, but at the same time that is a proposition that must be considered, particularly if the patient is not in good operative condition, local anaesthetic notwithstanding. These patients are shocked more by the operation under local anaesthetic than by a general anaesthetic, and their diabetes can be aggravated and they can be thrown into coma. We therefore have an internist assume the responsibility, as I have said—we put it up to him because he knows about diabetes, and we are glad to help clear up the foci of infection at his direction.

DIABETES FROM THE STANDPOINT OF THE OPHTHALMOLOGIST*

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CHICAGO

The first mention of cataract in a diabetic appears in the works of Rollo,³² the discoverer of the meat diet in diabetes. He spoke of two cases of

*One of the papers of a symposium presented at the annual session of the Indiana State Medical Association, Gary, September, 1928.

disturbance of vision that developed in diabetics and told of a case seen by Saunders of bilateral cataract in a diabetic. Although there were earlier descriptions of diabetes both in England and in other countries, cataract is not mentioned specifically as a complication. Some thirty-six years later, the condition was mentioned by Unger,³⁸ but the first case to be described in detail and then operated upon was published by Berndt.⁵ In the same year, Jahn²² also told of a case. Within a few years, reports were published by Liman,²⁹ Benedikt,³ Ruete,³⁴ Bourcharde,⁶ and others, so that when von Graefe¹⁶ estimated that cataract was present in twenty-five per cent. of all hospitalized cases of diabetes, the condition of diabetic cataract was fairly well recognized by the English and German authors. That was in 1858 and it was not until three years later that Lecorche²⁸ brought the attention of the French ophthalmologists to this condition. In 1863, Knapp²⁴ reported that diabetic cataract did not vary microscopically from the ordinary senile cataract and in this he was corroborated some years later by Becker,⁴ Deutschmann,¹⁰ and others. A very complete bibliography of these early publications was compiled by Leber²⁷ in 1875.

The youngest case of diabetic cataract reported by Galezowski¹³ was nine years old; another was fourteen; and a third, twenty-three years. He found that twenty-seven per cent. of all diabetic cataracts occurred between the age of fifty and sixty, and thirty-five per cent. from sixty to seventy. Eight different reports during the subsequent decade from the pens of eight different authors gave the percentage of cataract in diabetes anywhere from ten to thirty percent, irrespective of the age of the patients. Among fifty-six cases of diabetic cataract, twenty-five male and thirty-one female, Zeller⁴¹ found only two unilateral cases. The statistics of the Uhthoff³⁰ clinic showed that five percent. of all cataract operations were performed upon diabetics and that twelve hundredths per cent. of all ocular diseases were diabetic cataract. Following is a table showing the incidence of cataract and other ocular complications of diabetes, compiled from three fairly large series of cases.

Ocular Condition	Schmidt-Rimpler ³⁸ 150 Cases	Galezowski ¹³ 144 Cases	Kako ²³ 250 Cases	Lagrange ²⁶ 52 Cases
Keratitis	0	3		8
Iritis		5	1.1	
		3		6
Choroiditis		3		
Cataract	45	31	3	25
Retinitis	23	21	23.5	36.5
Ocular paralyses	7	7		2
Amblyopia	10		6.1	4
		25		
Optic Neuritis	25		3.9	6
Refractive disturbances	5	0	3.6	2
Vitreous opacities	3	0	1.4	0
Lid & orbital abscesses	0	0		6

Groenow¹⁷ mentioned that five per cent. of the ocular palsies in diabetes are in the nature of an ophthalmoplegia externa which he believes due to a direct action of the sugar upon the centers. Dillenlafoy⁹ found a higher percentage. In fifty-one cases of ocular paralyses in diabetics, he found the sixth nerve involved in twenty-eight, the third in 12, the fourth in five, and an ophthalmoplegia externia in six. These paralyses developed suddenly and usually were of short duration, although they might be obstinate. Relapses were not rare. The paralyses were frequently accompanied by a homo-lateral neuralgia, probably due to nuclear disturbance in the region of the fourth ventricle. During his war service, Gallus¹⁵ had the opportunity of examining seventy-six diabetics, among whom he found one cataract and one retinitis and fourteen cases of retro-bulbar neuritis. As this is not infrequent among younger diabetics and as he does not give the age of his patients, it is probable that the majority of his cases were under forty years. He did not believe that the cataract was due to the diabetes, but was probably on the basis of some hereditary factor. The number of cases of iritis in diabetics is small. Bardell³ found only three cases among 20,000 patients, but Brunetiere⁷ believes it to be somewhat larger than reports show.

In older people, diabetic cataract develops much like any other peri-nuclear senile cataract, only somewhat more rapidly, according to Foerster^{11a}. He described a form of anterior subcapsular opacity that developed along the optic axis and spread laterally that he considered characteristic for diabetes. In the *American Encyclopedia of Ophthalmology*, the idea is expressed that cataract in older diabetics is not necessarily of diabetic origin. Heine²⁰ does not question the existence of a diabetic cataract, but believes that in older people there is nothing sufficiently characteristic to warrant positive diagnosis. But in younger people, a *bilateral, rapidly developing, subcapsular, central opacity* that becomes perinuclear only later, is characteristic of diabetes. Microscopically, a diabetic cataract can be distinguished only by the fact that the pigment, not only in the neighborhood, but throughout the entire eye, is loose and floats off easily. Foster Moore³⁰ agreed with this when he said that the term "diabetic cataract" should be confined to that kind that develops rapidly in young people and is characterized by the rapidity of growth, the homogeneity of texture, the development in the posterior layers of the lens, and the bilaterality. It occurs only when the disease is well advanced. Romer³³ states boldly that diabetes can lead at any age to a cataract that is characterized as a cataracta subcapsularis. But later on he modifies this statement by saying that this holds true only in young people with certainty and in older people possibly. Anatomically, he believed to have found degeneration areas in the capsular epithelium with all nuclei missing or

showing abnormal staining reactions in various areas. The fibres in the equatorial region showed some molecular disintegration and were separated by coagulated masses of albumin. These findings have not been corroborated by others. He does agree with others, however, that the progress of the cataract is not influenced by the elimination of sugar from the blood. Poulard³¹ believes that diabetic cataract is not as common as it is supposed to be, for "not every cataract in a diabetic is a diabetic cataract". He finds it impossible to differentiate a diabetic cataract from a senile cataract in older persons and even in younger persons, it presents no definite clinical characteristics. Terrien & Cousin³⁷ consider as a diabetic cataract a soft bilateral opacity that appears rapidly, matures rapidly, and does not differ from a senile cataract in appearance.

Under the influence of light, Schanz³⁵ found that grape sugar and especially acetone caused the easily soluble albuminous bodies to be changed into poorly soluble globulins. In this way, he accounted for first sclerosis of the lens, then presbyopia, and eventually cataract. Romer³³ found that in the blood of diabetic patients with the juvenile type of diabetic cataract, there were substances that have the power of breaking down the lens tissues. Alleviating the diabetes does not stop the clinical progress of the cataract, was the clinical dictum laid down by Hirschberg²¹.

Bull⁸ reported his experiences regarding the adverse course of healing in diabetic cataract and found that arterio-sclerosis played an important role in the etiology of the complications. The progress seemed to depend, not upon the percent of glucose in the urine, but rather upon the degree of acid intoxication. As opposed to that view, Hayashi¹⁹ found that the blood of animals, made diabetic by amyl nitrate or pancreas extirpation, had less than the normal bacteriacid qualities and that the presence of a moderate amount of sugar in the tissues favored the deposit and growth of pus cocci and increased their virulence. The danger of hastening the fatal outcome of the disease by the shock of operation for diabetic cataract was discussed by Lagrange²⁶. He refused to operate in a case where the disease was rapidly progressive and where acetone and diacetic acid were in the urine. Both Whiting⁴⁰ and Falchi¹¹ agreed with this view.

Taken by and large, the consensus of opinion regarding cataract in diabetes may be summed up as follows:

During the course of a diabetes, cataract may appear independent of the sugar content of the blood or urine. Such a cataract may be a senile or a diabetic cataract and the two cannot be differentiated clinically. In younger people, a cataract due to diabetes appears as a bilateral, subcapsular, rapidly appearing and rapidly maturing opacity of both lenses. In older people, the same

may hold true, but it is impossible to say whether such an opacity is senile or diabetic.

Diabetic cataract may be operated upon with perfect safety, provided the patient has no acetone or diacetic acid and provided that the blood sugar has been reduced to the minimum quantity possible. Unless such is done, there is apt to be a loosening and discharge of pigment cells in the aqueous and a greater susceptibility to pus infection.

The first description of a diabetic retinitis dates from the pen of E. Jager¹¹ in 1855-56, who described a case of retinitis similar to an albuminuric, but occurring in a diabetic. Two years later, von Grafe added seven cases. From then on many individual cases were reported, all of which were compiled by Leber in the bibliography, published in 1875. Among these, one of the striking cases was described by Noyes in 1869, who first found a diabetic retinitis without nephritic complication. This was corroborated shortly afterwards by Hattenhoff. Another unusual case was reported by Galezowski¹² in 1862 of a diabetic retinitis with hemorrhages, plus an optic atrophy. At this time he commented upon the frequency of vitreous hemorrhages in this condition. A Retinitis Punctata Centralis Diabetica was described by Nettleship in 1885 and simultaneously by Samuelsohn, but was not called characteristic for diabetes until Hirschberg so described it in 1891. The latter believed that the following points characterized a diabetic retinitis:

1. Small light glistening spots about the macula, either with or without small hemorrhages. Bilateral.
2. Retinal hemorrhages very prominent.
3. Sudden central vein infarct of hemorrhagic origin.
4. Diffuse small hemorrhages.

He further distinguished three forms of retinitis occurring in a diabetic:

1. A characteristic inflammation of the central area of the retina with small light spots and usually also minute hemorrhages (Retinitis centralis punctata diabetica).
2. Hemorrhages into the retina with subsequent inflammatory changes and degenerations (Retinitis Hemorrhagica diabetica).
3. Unusual forms of retinal inflammation and degeneration with visual field disturbances and hemeralopia.

Class 1, which he considers as diagnostic, may appear in

- a. Patients with sugar but no albumin in the urine,
- b. Patients with sugar only at first and later albumin in the urine,
- c. Patients with both albumin and sugar in the urine.

He maintained that this form could be differentiated sharply from the more or less typical albuminuric retinitis. In the four main articles

that he wrote concerning this affection, there is an excellent, but not complete bibliography to date.

Juler, in 1892, described a typical case of diabetic retinitis without albumin, although the retinal appearance was that of a renal or albuminuric retinitis.

Among 45,000 patients, Schweigger found that 450 had retinal hemorrhages, either with or without accompanying retinitis, twenty per cent. of this number were diabetics, and of that twenty per cent. those with hemorrhages alone were three times as frequent as those with hemorrhages complicated with retinitis. Kako compiled a very complete bibliography up to 1903 while describing the cases of retinitis in diabetics found in the Uhthoff Clinic. Among the fifty-seven cases found, sixty-three per cent. showed no albumin in the urine and the remaining thirty-seven per cent. showed both sugar and albumin. Graefe found ninety cases of retinitis among 700 diabetics and in only two of them could no kidney involvement be shown. The youngest case was thirty-nine years old. A rather interesting comparison was made by taking blood pressure of twenty-four cases of retinitis (cases taken at random) where the average was found to be 170 mm. Hg., while in twenty-four control cases of diabetes without retinitis, the average blood pressure was found to be 130 mm. Hg. Where retinitis was present in a diabetic, the blood sugar was always markedly increased. According to Otfried Muller, Weiss, Zeller, and others, in hypertonicity, diabetes, and nephritis, very marked changes are found on capillary microscopy. Vollhard later stated that he had never seen a case of diabetic retinitis in which there was not a hypertonicity. Lo Cascio, who accepted Hirschberg's classification, found that twenty-three per cent. of the ocular affections in diabetics lay in the retina.

Oufroy claimed that twenty-five per cent. of all diabetics have normal kidney function and no hypertension; fifty per cent. have vascular hypertension, the kidney function being partially intact; and twenty-five per cent. have nephritis and azotemia that may hide the glycosuria. In Class I are found the cases of Retinitis Centralis Punctata Diabetica; in Class II, associated with nephritis, are found the forms of retinitis with large hemorrhages; and in Class III occurs the papilloretinitis. In a latter article, Oufroy reported upon patients that had been observed for a period of ten years. Only about fifty per cent. lived more than two or three years after the onset of the retinitis, while the remainder lived more than ten years. Those with severe hypertension died within one year and those with moderate hypertension were apt to die of some intercurrent disease. Thus the true diabetic retinitis, not due to hypertension, seems to offer a more favorable prognosis as to life than the hemorrhagic form. Among 300 cases of diabetes, Wagoner & Wilder found forty-four

cases of retinal disease and from these drew the following conclusions:

1. Retinitis does not occur in uncomplicated cases of diabetes, even of the severe type (It was not present in eighty consecutive cases.).
2. Cases of diabetes with retinitis are always complicated by vascular or renal disease and the diabetes is apt to be mild and chronic.
3. The cause of the retinitis in diabetes seems to lie in the accompanying vascular changes.

Benedict also believed that the retinitis of diabetes does not depend upon the diabetes alone, but rather is upon the basis of a retinal arterio-sclerosis. Garrod, too, indicated that diabetic retinitis may be due to vascular hypertension. Shafer, on the other hand, distinguished as forms of diabetic retinitis, the punctate, the hemorrhagic, the mixed, and lastly, the albuminuric that occurs in the eyes of diabetic people.

Goodheart was of the opinion that it is the chronic and slowly advancing Bright's disease that causes the retinal lesions found in diabetes. He did not find that a diabetic retinitis differed ophthalmoscopically from a nephritic retinitis. West also found nothing ophthalmoscopically characteristic that permitted a retinitis of diabetes to be differentiated from that of nephritis. The nephritic retinitis may be in the nature of a degenerative vascular change or a toxic exudative change. This latter form occurs in diabetes which accounts for the slight variation from the classical picture of albuminuric retinitis. Terrien & Cousin, too, describe a diabetic retinitis as presenting a picture much like that of an albuminuric retinitis, but with hemorrhages less frequent and less severe. They divided diabetic retinitis in three classes:

1. A central punctate form along the vessels and around the macula.
2. A diffuse hemorrhagic form especially around the disc. This is the most characteristic type.
3. A profuse hemorrhagic form with hemorrhages into the vitreous, which is very rare.

Heine, however, accepts the Hirschberg classification. Poulard found that retinitis occurred in two per cent. of all diabetics and that it resembles the hemorrhagic and nephritic retinitis so closely that the differential diagnosis can be made only by examination of the urine. There are a few differences that may make one suspicious, namely the lack of retinal and papillary oedema. The lesions are apt to be more central, isolated, and punctate. The prognosis as to life is less severe than in nephritic retinitis, but worse as to sight. He suggested that there may be in diabetics a substance in the blood that will lead to retinitis, exactly as in nephritis. Roemer³³ believed that the retinitis in diabetics is more probably due to albumin than to sugar.

Foster Moore³⁰ upheld most vigorously the oc-

currence of a diabetic retinitis on the following grounds:

1. Retinitis occurs in diabetics only past 37-40 years old.
2. Several hundred cases have already been reported of diabetic retinitis without albumin in the urine.
3. Although clinically somewhat similar, still diabetic, renal, and arterio-sclerotic retinitis can frequently be differentiated with the ophthalmoscope.
4. Diabetic retinitis does not occur and renal retinitis does occur in children.
5. The retinal exudate in diabetes has sharp edges and is solid with a soapy or waxy look.
6. The star figure is uncommon.
7. Soft edge cotton wool patches are not present and there is no retinal oedema.
8. The hemorrhages are usually deep in the retina and hence are usually circular.
9. Cases have been reported of diabetic retinitis with normal blood pressure and no albumin in the urine (Moore-Nettleship-Kako-Mackenzie-Anderson-Juler, etc.)

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DIABETES FROM THE STANDPOINT OF THE INTERNIST*

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Whereas the task of Dr. Beck was very simple—he spoke of tonsils and ears; and the task of Dr. Gradle even simpler, speaking only about the eyes; my task is really difficult. For some reason which I have never been able to fathom, many doctors believe that since the advent of insulin, diabetes has become a simple disease. On the contrary, it has become a much more complicated disease than ever before. The implications of the disease today are tremendous, as may be seen from the fact that whereas the first issue of Joslin's book which appeared in 1916 contained 440 pages, the fourth edition out this year contains approximately 1,000 pages.

A most important thing to realize today is that the advent of insulin has changed the course of the disease diabetes. The mortality statistics have changed, the clinical picture, the treatment—everything, not to make it simpler but to make it more difficult. In the old days before insulin, diabetic coma was a frequent cause of death. Today, diabetic coma even in children, is becoming a comparatively rare cause of death. The acute diabetes of childhood is now disappearing, so that the average length of life of the diabetic child, which was two and a half years, is already up to seven or eight years. The diabetic child is apparently going to live to adult life, and as the diabetic child increases its length of life the complications which we have been accustomed to see in chronic diabetes are increasing. Arteriosclerosis and the signs and symptoms that we associate with arteriosclerosis in the older diabetics

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are now coming to the fore as the cause of death in all diabetics.

It might be interesting in this connection to tell of one case. A young man who had had diabetes for eight or nine years died this year at the age of thirty-one, after a sudden attack of terrific pain in his precordium. Clinically, he looked like a man with coronary disease, and at autopsy was found coronary thrombus. I have not the details of that autopsy, but if it is true that nothing else was found, this case illustrates better than anything I can say regarding the first point in the discussion today.

The second, and probably the most important point in the discussion today, concerns the food we are going to give the diabetic. It is of course absurd to conceive that because insulin is being given, diet is easy. The more patients receiving insulin, the more complicated does diabetes become. Insulin, as you know, represents quantitative replacement of something absent in the body. A given amount of insulin to a given individual will take care of a certain amount of carbohydrates. In the adjustment of the diet then, we have to remember that we are dealing just as much with quantitative values now as we were before. And when one asks for a definite "diet for diabetics" today the answer is that there is no such thing. When one studies the diets now being employed in various diabetic clinics in this country one finds variation in degree, variation in quantity, variation in quality, of such antagonistic nature that one wonders what it is all about. At one clinic it is not unusual to have patients on a diet with as much as 250 grams of carbohydrates. Another clinic advocates comparatively high fat diets. Joslin uses a moderate diet. One patient will do well on one diet, and another patient will do just as well on a different diet. As far as I can make out, the answer today is the same as it was before insulin—that we must study the diabetic patient individually, not give him too much to eat, keep him sugar free, and he will get along pretty well. I cannot find today any evidence in the literature that any particular diet is a better diet than any other kind.

After all, when we treat the diabetic we are interested from a practical point of view in returning the man to health and economic efficiency. If we are dealing with two patients, one a seamstress working indoors, who is a small eater, and the other a backwoodsman and a big eater, it is obviously absurd to give these two patients the same diet. Let us say that the seamstress is mildly diabetic and can get along with a small amount of food without insulin. Her diet must consider her protein needs and then allow her to eat what she wants, provided there is no acidosis, no glycosuria, and the balance is not thrown off too much. On the other hand, when we find that the backwoodsman eating a certain low caloric diet is showing sugar, it is our duty to increase his diet to enough

calories to take care of his actual physical needs. How are we going to do it? Personally, I figure it out this way: I ask the man what he is accustomed to eat and thus find out what his normal diet in the backwoods is going to be. If this diet is not too unbalanced, I try to make his new diet approach his customary food, and give him insulin to cover the new diet. In other words, instead of making a theoretical diet, I try to find out what the individual patient needs to live his usual life, try it out, and give him enough insulin to cover it.

At the American Medical Association in Minneapolis this summer five or six men took part in a symposium on this question. All the men using different diets expressed their point of view. I have no set ideas on the matter, and after I heard all this discussion I came to the conclusion that the method of taking each individual patient, finding out what he wants, being sure that his diet is not too unbalanced, and covering it, if necessary, with insulin, is about as good a practical procedure as we have.

Coming to insulin, there are a few words to say about the relation of insulin to tolerance. As long as you give insulin it works; when you stop giving insulin, usually the patient is in the same state as before. The vital question today is this—if we give insulin to a diabetic patient long enough do we cure him, or do we increase his tolerance? The evidence at hand is certainly inconclusive. All of us who were treating diabetics before the days of insulin can recall patients being kept sugar free for a long enough period of time on diet alone, who at the end of a given time showed an apparent increase in tolerance. The same thing is true today when such patients are made sugar free by insulin. Another thing is true—that certain patients given insulin in large doses up to a certain time can within a short period of time take the same diet or even a larger diet with smaller doses of insulin. This does not mean that insulin improves tolerance. It may mean that a slight infection in the throat or head was present at the beginning; it may indicate that good treatment by diet and insulin has kept the patient sugar free and has increased tolerance. I am not at all convinced that insulin *per se* has increased tolerance. Insulin makes it easier to treat diabetes and keep the patients sugar free, and as a result of being sugar free for a long time it has been possible to increase the diet.

A word about remedies given by mouth. Synthalin comes from the Francke clinic. We have done some experimental work on it and our own conclusions are that it does not help much. We could not replace insulin by synthalin, nor could we make mild diabetics sugar free on synthalin. At the American Medical Association meeting Wilder, of the Mayo Clinic, gave a very conservative statement in which he differed from the statements made in some of the other papers. However, in the discussion the general consensus of opinion

was that synthalin is not of value in the treatment of diabetes. Personally, I should say it certainly is not ready for use in general practice, and if it is to be used at all it should be used only in personal studies under the most ideal control conditions. If it is any good we must find it out; if it is no good we must find it out, and we cannot find it out except by more careful experimental study.

The last point in my discussion is the connection of diabetes with the specialties and with general medicine. Both Dr. Beck and Dr. Gradle stated that diabetes is a disease which when encountered in cases coming to them for treatment, is treated by the internist with whom they work hand in hand. I hold that principle is so sound as really not to require discussion; yet it is not accepted altogether as it should be. I want to cite a personal experience with diabetes in pregnancy.

I worked for years with Dr. DeLee at the Lying-in Hospital. The text-books talk about the danger of diabetes in pregnancy, about the danger of sugar in pregnancy. When I started, Dr. DeLee accepted the principle of medical cooperation, and every pregnant woman who had medical complications became a medical case, under our control. We found that our conception of the diabetic pregnant woman was erroneous. We began to treat her as a diabetic woman who was pregnant. We found that a certain percentage of pregnant women show glycosuria; some have renal glycosuria without true diabetes; others are women who, in perfect health at every other time, become mildly diabetic when they become pregnant. These mild cases seen in women who are pregnant, and only during pregnancy, should not be treated as radically as in the past; if they are treated conservatively by the medical man they can easily be kept sugar free. This was proved in our series at the Lying-in Hospital. We also see women with true diabetes who become pregnant. These require very careful, painstaking care in treatment. It is not an easy situation, but the point I want to make is that if we are going to get any solution of the relation of diabetes to pregnancy, and continue it to the other specialties, we must study these cases very carefully. So it is with every one of the specialties. I want to emphasize this.

We do not fear surgery in the diabetic as we used to. Usually, an emergency operation may be performed with fairly reasonable assurance that in the majority of cases careful watching of that patient after the operation will control the situation. But that does not mean that every diabetic who has a minor condition should undergo an operation. I think we medical men are well justified in demanding that the surgeon show a real reason for operating on a diabetic before we permit it. Whether pus in an antrum is a real reason for operating on a diabetic is perhaps open to question, but I am inclined to agree with Dr. Beck that infection lowers the tolerance of the individual. If a patient has bad tonsils or an infection in the

antrum I should say the diabetes as well as the nose and throat condition demands the operation.

One or two things should be emphasized. We frequently forget that the diabetic is a dehydrated individual, and surgeons do not like a dehydrated individual, certainly not a dehydrated diabetic. When operation becomes necessary on a diabetic we should be careful to watch for signs of dehydration, the red, dry tongue, the dry tissues. I have seen diabetics prepared for operation carefully as far as everything else was concerned, but no attention paid to the water balance.

A final word about arteriosclerosis, which today is the real complication with which we must deal. I do not know anything that is more discouraging than to see a diabetic with arteriosclerosis of the leg, a painful toe, or a little red spot on the toe. I think it is one of the most difficult problems we have to meet. Should the case be operated on early? Are we going to be able to save these diabetic arteriosclerotic people? I have been very conservative in my own practice, but it takes some time to decide that question. We have patients walking around today who had no pulsation of the dorsalis pedis artery a year ago, and I also have some who were operated who are now walking around on crutches. Some have died. It seems to me that at the present time we are expecting too much of insulin in these cases. I have an impression that in these arteriosclerotic conditions the terrific pain is apt to be made worse by insulin, in large doses particularly, and it is not of specific value in the relief of the condition. I think by long rest, postural treatment, increased water intake, carefully balanced diet, and at times insulin in small doses, we are doing far better for the arteriosclerotic cases than by any other procedure I know of.

In closing, I want to state that I was very happy to hear Dr. Gradle say that retinitis in a diabetic is, in his opinion, not a diabetic condition. For years I have felt that since we only see this in older diabetics who already show signs of cardiorenal degeneration, it is not primarily diabetic. We cannot cure them, but we can stop the progress of the disease. Last week I saw two patients in whom five and seven years ago, respectively, this process was definitely stopped. They still have retinitis, but they are not steadily getting worse.

DISCUSSION

ROSCOE H. BEESON, M.D., (Muncie): I trust you have all received as much inspiration from these talks as have I. From the story of diabetes as it is today and was ten years ago we are forced to the conclusion that our diabetics are not much better off than ten years ago, as viewed from the mortality statistics. I refer to child diabetics. Why is that? It must be for one of two reasons—either that the doctors do not have the cooperation of the patient, or that the doctors themselves are to blame. It might be the doctors are to blame. One reason is that we know the gauntlet the child dia-

betic has to run, consequently they put the child diabetic into competent hands. Here in Indiana we must have at least 50,000 diabetics that we are responsible for. What are we going to do about it? What we should do from an economic standpoint is to give these diabetics what they have coming to them. Ten years ago when I graduated from medical school I am quite sure I would never have graduated if I had not known something about Allen's treatment for diabetes. That is gone and we have something better today, and the best thing is insulin. I remember hearing Dr. Emerson speaking about the advent of salvarsan, how the doctors said they could treat syphilitics with this remedy and they would be all right. Six or eight years ago when insulin came in they thought as the doctors did about salvarsan—that it was a cure-all. Experience has proved that this is not so. Insulin is very good, but not as good as we think it is.

However, I think insulin is the thing we should use. I regard insulin as consolation for the past, help for the present, and hope for the future.

I have enjoyed these talks very much, and I have learned a great deal, especially in regard to diabetic retinitis. I did not think insulin would be contraindicated in those cases. I am glad to know that it is.

In regard to pregnancy, it is my own personal opinion that we have a number of pregnant woman patients who are diabetics, but I would not advise abnormal termination of pregnancy in any of these cases. As the doctor stated, some of them are improperly treated, but the thing to do is to treat them the best you know how, and if you make a mistake your conscience is clear.

Two things the doctor has to carry in his grip now that he did not have to carry ten years ago. He must carry insulin, and also an intravenous solution of dextrose. You are called to see a patient that you know is diabetic, and you find the patient unconscious. What do you think? Either that the patient has hyperglycaemia, or is in diabetic coma. He might have a stroke of apoplexy or uraemia, but if he has a flushed face and a red spot on the forehead, a slightly increased respiration, and especially deep labored respiration, with acetone acetic acid in the urine, watch out for diabetic acidosis. What are you going to do in a case like that? You will have to do something quickly. If it is hyperglycaemia, use dextrose; if it is diabetic acidosis, use insulin. You might ask why do you use dextrose when you already have a hyperglycaemia? For this reason. If it is hyperglycaemia you will relieve the patient in three to five minutes and probably save his life; and if it is diabetic coma you have not done the patient any harm, because what we are concerned with then is not getting rid of the acidosis, and we do not care if we do have some sugar in the urine.

I like to bolster up the idea of the water balance. I think that is the most practical thing that has

been said today. Look out for symptoms of acidosis, and watch out for salt and water balance. These patients must have the proper water balance. Out of one hundred patients that come to our office there will not be more than fifty per cent. that will need insulin. If you get them down to normal weight practically all of them will be converted into extremely mild cases of diabetes. The main thing to be considered is the total calories required and the body weight; those are absolutely the only two things that will govern the amount of insulin required.

The first thing is to tell our patients about diabetes. Explain to them that they are not so different from normal individuals, that they do not happen to have enough insulin to take care of their food, but that they can do everything that anybody else can, provided they get enough food. All they have to do is to watch their diet. In other words, we should not promote a psychology of invalidism. I believe if you cripple a man mentally you cripple him physically, and vice versa.

M. RAVDIN, M.D., (Evansville): In ophthalmic practice we frequently observe intraocular phenomena which suggests to our minds the word "Diabetes" and leads us to verify our thought suggestion in the laboratory. Not so in otolaryngology. I know of no disease about the ear, nose or throat which would suggest diabetes as its cause. I may say without fear of contradiction that many diabetic come to our consulting rooms complaining of all sorts of ear, nose and throat ailments who never tell us of their glycosuria and who receive treatments at our hands with indifferent results. I repeat that diabetes mellitus in the earliest stages presents no characteristic observable external phenomena except it be obesity, therefore it would behoove everyone of us to keep in mind a possible glycosuria or a hyperglycaemia whenever our therapeutic efforts are not crowned with success. It would perhaps be better for every otolaryngologist to make use of the laboratory oftener or better still, to know the sugar metabolism of every patient the same as we do of their renal function. It behooves everyone of us to keep abreast of the recent advances in medicine and make daily use of them in our work. It is not enough to know that our patient has no glycosuria but we should know the sugar content of the blood stream. Many an obscure headache treated unsuccessfully with glasses or correction of some nasal deformity will disappear by reduction of a hyperglycaemia, and of course our surgical results will be much better if we know the sugar metabolism of our surgical cases.

I am well acquainted with Dr. Beck's pioneer work in otolaryngology. As in other conditions of pathologic physiology, so in diabetes mellitus, he was one of the first, if not the first, to insist that no man has a moral right to operate on a patient before a complete physical inventory has been made

by a competent internist, pathologist and roentgenologist, emergencies excepted of course.

Another thought. In diabetes mellitus the pituitary function should be looked into. Hypopituitarism is quite often associated with glycosuria and hyperglycaemia. Most diabetics are fat before they become diabetic. No detail of the physical make-up of patients should be too small to escape attention.

C. P. CLARK, M.D., (Indianapolis): I want to congratulate the essayists on the clear manner in which they have presented the papers.

The paper of Dr. Gradle was of particular interest. The percentage of diabetic eye complications as reported in the different eye clinics in the various parts of the world vary a great deal. This is more due to the time of report than to any other factor. Formerly it was the custom to do everything for the patient except to consult the ophthalmologist, unless there were visual complications. Then the eye man saw him in an advanced diabetic condition. At the present time diabetic patients are seen early, and more of them are seen as ambulatory patients in the office rather than at the charity clinics.

Iritis in a diabetic patient is unusual. The iritis is not due to diabetes, but to other factors, usually focal infections. I would like to refer to two patients recently seen by me that illustrate that point. One was a young man, age twenty-one, who had other complications. He had a low grade nephritis and a marked focal infection, bad teeth and tonsils. He came complaining of bilateral iritis. We asked him to have a physical examination made, which he did, and it showed the urine loaded with sugar and albumen. Treatment of the diabetes and later elimination of the focal infection cleared up the eyes and the patient now has nothing left of the eye complication.

The other case was a girl of eighteen who had albumin in the urine and an increased blood sugar. Elimination of the focal infection, control of the diabetes with insulin, and the eye condition cleared up. She also had a retinitis which may have been due more to the kidney condition than to the diabetes.

We have heard a good deal of diabetic cataract, but from what Dr. Gradle has said, I would say most of the patients that we see are senile cataracts complicated with diabetes. The diabetic patient properly prepared by the internist is a good ophthalmic surgical risk; not as good as the non-diabetic, but better than was the case before we had insulin.

I want to emphasize the point that I think the general practitioner would find it well worth his time to pay attention to the patient's eyes, because if the condition is not controlled, the vision once lost is not regained.

MAURICE BUCHSBAUM, M.D., (Gary): A great deal has been said about diabetes and we have been led to believe that with the advent of insulin the

diabetic problem was solved. As a matter of fact, the pathogenesis of diabetes is still in obscurity. Joslyn, in the last edition of his book, says in one or two lines that the work of Prof. Lowe of Graz, Austria, may give us some light on the diabetic mechanism. I have studied Prof. Lowe's work and in a few words I will try to give you the substance of it. I believe it is one of the most interesting things that has been done on diabetes and insulin. Insulin is the internal secretion of the pancreas, as we all know. How does insulin work? Insulin, when injected into an animal, enables that animal to utilize carbohydrates which are circulating in the blood. Sugars are present in the blood as such and the liver fixes it as glycogen. In the diabetic, increased glycogenesis above the liver threshold is taking place, that is, the glycogen is dissolved in the liver and thrown back into the circulation and we have what we call a hyperglycaemia. In addition to that we have another type of hyperglycaemia which is due to the inability of the tissues to absorb sugar from the blood.

Lowe and Geiger, in 1913 found that when the liver is isolated from the animal and transfused with serum it is able to take up the sugar from that serum. Also they found that serum from the diabetic patient or the diabetic animal if transfused through such a liver that the liver then is unable to take up the sugar from the serum. Wiechman, in 1924 had determined that in normal blood the sugar is equally distributed between the plasma and the fixed tissue cells. The red blood corpuscles in the diabetic, however, do not contain as much sugar as in the normal, but sugar is present in larger amount in the plasma of the diabetic. If you take blood from a diabetic and add insulin to it in vitro you will find the red blood corpuscles take up more sugar. Blood from the diabetic contains less sugar in the red blood cells, but add insulin to that blood and the red blood corpuscles take up the sugar. That will show exactly how insulin works in this question of diabetes.

According to that, there must be a substance present in the diabetic blood which prevents the red blood corpuscles from taking up the sugar. The only way sugar can be utilized by the body is when it is fixed in the red blood corpuscles. No matter how much sugar you put into the blood stream if the cells cannot take up the sugar from the plasma the sugar cannot be utilized by the human organism. Lowe and Geiger and a few others have taken up the study and found out what that substance is and where it comes from and they find on analyzing the diabetic blood that the serum contains a substance which, if isolated, prevents the fixation by red blood cells, and they call this substance glycemene. By injecting it into the normal human being and into the animal they have produced a temporary hyperglycaemia. This may be due either to increased glycogenesis by the liver, or it may be due to the absence of absorption of the sugar by the cells.

In order to get the proper results from treatment by insulin we want to know quantitatively how much glyceme is present, and the reason we do not get results from insulin is because we do not determine the amount of glyceme range in the blood. That will explain why in any infection you do not get results. The red blood cells do not carry enough sugar. If you want to get results you will have to determine how much glyceme is circulating in the body.

The primary focus of diabetes is in the liver, a primary hepatitis, and following that the pancreas tries to secrete enough insulin, and when the cells of Langerhans become exhausted we have to resort to artificial injections of insulin.

JOSEPH C. BECK, M.D., (closing): I only want to emphasize one point made by Dr. Ravdin—that we do not know when we examine a man's nose and throat whether he has diabetes. I started out by saying that the general examination we should have, even for a simple operation on the nose, will probably disclose that. But that is not all. Recently I had a young man twenty-seven years old who had a suppurative nose. He told me he had lost a tremendous amount of weight from this suppuration of the nose, and that made me suspicious that the nose condition was not the whole trouble. When this patient was treated for diabetes the nose cleared up and no operation was necessary. The point I make is that what appear to be positive infections are often pathologic changes about the nose and throat due to the condition of the patient's metabolism.

Speaking of the danger of operation, it is not always necessary to take out the tonsil to get rid of tonsillar infection. There may be destruction of the tonsil by electrocoagulation which will be of great benefit, and a minor operation is better than a radical in a diabetic patient. We should also have the dentist see what he finds in the mouth of these diabetic patients. I have seen horrible conditions in the mouth because the dentist did not know anything about diabetes.

HARRY S. GRADLE, M.D., (closing): I think I have been misunderstood in regard to the use of insulin in ocular complications. I did not mean to imply that it should not be used in retinitis—far from it. I did state specifically that no insulin should be used after cataract extraction. Insulin may be used to get the patient up to standard before operation, but it must not be used immediately preceding or for some little time subsequent to the extraction.

In 1913 Hertel first mentioned hypotonicity of the eye in diabetic coma. Since then there have been a few more reports in the literature, but as far as I know, only one case reported of diabetic coma without a soft eyeball. I do not know whether that was sufficiently established to allow it to be used as a diagnostic symptom, but certainly it is a great advance. When you are called to see

a patient in coma, take the tension of the eyeball. Your suspicions may be aroused as to the possibility of having to deal with diabetic coma.

SOLOMON STROUSE, M.D., (closing): I want to emphasize the last remark. Diabetic coma was left out of my paper on account of lack of time. The soft eyeball I have never seen except in diabetic coma, and along with it are two other signs which do not receive in text books the attention they should. One is that the diabetic patient in coma has a characteristic tongue; it is red, beefy and dry. I have only seen it in one other case in my life, and that was a woman with very toxic exophthalmic goitre who was starved and dehydrated. I think we should emphasize that in our teaching.

Another thing is a yellow coloration of the palms of the hands and soles of the feet in young folks in diabetic coma. I never saw it in any other condition. It will disappear as soon as the acidosis disappears, and it will frequently be an early sign of impending severe acidosis.

PROGRESS IN PHARMACOLOGY*

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It is not my purpose to devote this discussion to a consideration of new drugs, their nature, administration and field of usefulness. In the case of some of the drugs and chemicals which are new enough so that full discussions of them are not found in standard texts, there is little that the pharmacologist can add. Many of them have but little physiological action, are advocated as remedial agents in certain diseases and require the benediction of the clinic rather than the approval of the laboratory. I shall endeavor therefore to survey certain fields of activity in which pharmacologists have been working and to deal only incidentally with certain of the so-called newer drugs.

I think the first object of such a survey should be a consideration of the question of the mode of action of drugs, how they act in the body to produce the effects characteristic of them. The processes of life are essentially conditioned on chemical and physical changes in the constituents of the cells. Foreign chemical substances may enter into these reactions, and thus modify them more or less profoundly, with corresponding changes of function. No known physical or chemical force can lead to anything else being produced from a fertilized toad's egg, but a toad, deformed or crippled it may be, nor can any drug confer on a living tissue-cell a capacity which is not already present within it, whether active or latent. Fundamentally, therefore, every pharmacological action consists only of a quantitative change in the function of the cell, an increase or stimulation, and a decrease or depression. Some of the reactions by

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which the capacity of a cell may be altered are comparatively simple in terms of physico-chemical changes, for example the inter-action between oxalates and the calcium of the tissues, the combinations with hemoglobin by carbon monoxide and drugs of the aromatic series, or the osmotic phenomena produced by various salts. Other reactions, notably those produced by the various potent alkaloids, occur only in living tissues and are exceedingly difficult of analysis. Various theories, postulating changes in cell membranes, changes in surface tension, etc., have been advanced at various times. Beutner recently has advanced a theory applicable to the action of various alkaloids based on electrical changes produced in living tissues. Nernst's theory of electrical stimulation holds that the stimulation by an electrical current is due to the change of salt concentration of a membrane or, in other words, to a change of pre-existing potential differences in tissues. Beutner found that various alkaloids (and in dilutions that parallel their toxicity) alter considerably the potential difference that exists at the junction between nitrobenzene with oleic acid and sodium chloride alkalized by the addition of soap. His interpretation is given thus: "If the assumption is justified that potential differences resembling to some extent those of our artificial system, are present in tissues, the addition of alkaloidal salts (and possibly other poisons) would primarily change the potential difference existing inside of living tissue. This change or polarization would be the cause of the stimulation produced by the toxic substance, just as polarization is the cause of the stimulation which a current causes, according to Nernst's theory. We may conclude, therefore, that when an animal collapses after a fatal dose of strychnine, atropine or other alkaloid, the cause of death is a similar injury to its brain, as if it had been struck by lightning or electrocuted."

This novel theory has, of course, several shortcomings, but it may be an important step in the clarification of this fundamental problem. And when we understand how drugs do what they do we will be immeasurably closer to the solution of many difficult problems in therapeutics.

Another important problem to the pharmacologist, and not much less so to the clinician, is the problem of congenital and acquired tolerance to drugs. Since the days of Mithridates and the *Antidotum Mithridaticum*, considerable attention has been directed to this mysterious question. With the advent of bacteriology as a science, and of its offspring, immunology, a great deal has been learned about the nature of tolerance or resistance to infectious agents. It is now well known that, when acquired immunity is induced in warm-blooded animals to toxins, bacteria, or indeed any protein substance, this immunity is accompanied by, and at least partly due to, the formation of specific antibodies in the blood or tissue fluids. The expectation, therefore, was that a similar mechanism

might explain the development of tolerance to chemicals and drugs. No such antibodies have been found, however, and we are left several rather unsatisfactory explanations such as decreased absorption, increased destruction by the liver or other organs, increased excretion by the kidneys or other organs, or an actual altered susceptibility on the part of the cells affected. A number of investigators are at work at the present time, particularly on the questions of morphine and cocaine tolerance and addiction, and it seems likely that a better understanding of these problems will develop. It can be shown in the case of morphine, for example, that tolerance only develops to the depressant effects such as narcosis and respiratory depression, while no tolerance develops to the stimulant effects such as constriction of the pupil, vagal slowing of the heart, etc. This indicates morphine is not either expeditiously destroyed, neutralized or excreted.

An interesting field of study has been developed in the past few years, particularly by Macht, in the effect of drugs and poisons upon various types of plant life. Until recently, relatively little attention has been paid to the study of the actions of drugs upon plant protoplasm, aside from the various chemicals which are necessary to plant nutrition and to which the plant is exposed in its various environments. By the development of a technique in which the effects of various drugs upon the growth of certain types of seedlings may be studied, quantitative as well as qualitative data may be obtained. It appeared early in such a study that plant protoplasm may be extraordinarily sensitive to some drugs or poisons as compared with animal protoplasm, while with others (notably cocaine) it is very much more resistant. It is possible, therefore, that methods for the detection of certain poisons, or for the assay of drugs now requiring tedious and expensive biological methods may result from a comprehensive study of this field of phytopharmacology as Macht terms it. It may be recalled in this connection that the investigations by Luckhardt of the anaesthetic properties of ethylene were prompted by the previous work of botanists in their study of the effect of this gas on flowers and plants.

Perhaps the branch of pharmacology in which practitioners are most interested is chemotherapy. The term "chemotherapy" in its more restricted sense is employed to designate that branch of pharmacological investigation which deals with the discovery of chemical agents which act specifically on the causative agents of infectious diseases. It implied, according to Ehrlich, a systematic search for chemical substances with a strong affinity for parasites, and a weak, or no affinity for the cells of the host. A great number of compounds were synthesized by Ehrlich and his co-workers and others in the search for effective agents, and the results in trypanosomal and spirochaetal infections such as syphilis and yaws have been of the

greatest value. The results in infections produced by the true bacteria, however, were discouraging, and Von Behring was led to conclude: "It can be regarded almost as a law that the tissue cells of man and animal are many times more susceptible to the poisonous effects of disinfectants than any bacteria known at present. Therefore, before the antiseptic has a chance either to kill or to inhibit the growth of the bacteria in the blood or in the organs of the body, the infected animal itself will be killed. The pessimism of him who declared that disinfection in the living body is for all time impossible appears to be only too justified." A closer analysis, however, of the instances in which chemotherapy was successful, disclosed reasons for a less hopeless attitude. It is quite clear, for example, that the arsenicals are effective in trypanosomal infections, not solely because they kill these organisms in high dilutions, but in addition by the participation of the natural defense mechanisms of the body. And the recent developments in the treatment of leprosy by the esters of chaulmoogra oil indicate that there is no law such as Von Behring mentioned which precludes all advances in the chemotherapy of bacterial infections. It is with considerable optimism, therefore, that we will watch the studies in this highly important field.

Developments in our knowledge of the hormones may not altogether be considered to be in the domain of pharmacology. It seems fitting, however, in such a review as this, to mention briefly some of the developments, as pharmacologists have played no small role in their study and are tremendously interested in their various possibilities. In the past few years we have witnessed the isolation of insulin and of parathormone. Thyroxin has been identified and synthesized. The extract of the posterior lobe of the pituitary has been separated into two active fractions, one having largely the oxytocic effect, the other the hemodynamic. Extracts of the anterior lobe are at present a source of active investigation. Ivy and Oldberg recently have described a hormone having an effect on the motility of the gall-bladder. The hormone of the adrenal cortex recently has been separated and partially purified by Hartman and others. The various hormones of the ovary, corpus luteum, placenta, and testis are being isolated and investigated. Many of these hormones, aside from their normal physiological role in the human economy, have pronounced biological effects and prove to be of considerable importance in medical practice.

I think it proper to conclude with a brief discussion of some of the recent advances in experimental methods used not alone by pharmacologists but by investigators in many fields. This is a subject of particular interest because it is not possible to conjecture all that may be learned, as the methods are more extensively employed. New experimental methods have always been followed by marked progress. The development of the Paw-

low pouch, Thiry fistula, balloon recording, x-ray visualization, etc. was preliminary to an immense amount of information on the physiology and pharmacology of the gastro-intestinal tract. Recently, various methods have been improved for the estimation of the cardiac output in the intact and unanaesthetized animals. Using such methods, Harrison and Leonard have contradicted the usual conception of the mode of action of digitalis on the heart. They found the cardiac output to be decreased and felt that digitalis affects the circulation much as morphine affects respiration. In our laboratory we have made use of a method enabling us to record the blood pressure directly in the unanaesthetized animal by transplanting or rather dislocating the carotid externally to the skin. The use of these methods together with that of the electrocardiograph, etc. may prove to yield considerable information on the pharmacology of the circulatory system. Cholecystography has enabled studies of the action of drugs on the gall-bladder to be made both in animals and man in the absence of anaesthesia and in varying conditions of health and disease. The use of iodized oils in the uterine cavity together with the x-ray has made similar studies of the uterus possible. London has introduced methods whereby the various inaccessible vessels, such as the portal vein, splenic vein, etc., may be reached either for the withdrawal of blood or the injection of drugs in animals that are normal and unanaesthetized. He anchors a suitable silver sheath to the desired vessel by a few stitches, and allows one end of the sheath either to protrude through the abdominal wall or be fixed subcutaneously. All of these methods are being used at the present time and will doubtless add considerably to the service that pharmacology may render to the medical profession.

THE PUBLIC, THE PHYSICIAN, AND THE PRESS*

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"Good News Suppressed" shouted *The Saturday Evening Post* to its several million readers recently. "Our physicians and surgeons," it continued, "are fairly boiling over with important information which they desire to communicate to the general public; but somehow they lack the simple, racy English in which to get it over, or the sense of form and accent which would make it interesting and attractive. The enlightened physician is fully alive to the educative powers of the newspaper and periodical press, but he does not know how to use the mighty engine he has so long despised."

This amounted to a virtual challenge to the whole medical profession. Needless to say, the

*Presented before the Muncie Academy of Medicine, November, 1928.

gauge has been accepted in numerous quarters by the physician.

The Public. Medicine is almost as universal a topic of conversation as the weather. Sooner or later, on hotel veranda or at bridge-luncheon or wherever people choose to foregather, talk drifts toward matters of health! A great deal of ignorance and gross misconception are displayed on such occasions. Nevertheless, people will insist on holding forth with the air of authorities at these informal medical symposia.

The public has long hungered and thirsted for authentic medical information. Unfortunately, however, it has been always in the position of having to take not what it *wants* but what it *can get*. The public has gained its information, or rather misinformation in matters medical chiefly from three sources: 1st, cultist propaganda; 2nd, quack advertisements and circulars that find their way to your doorstep; 3rd, well-meaning attempts on the part of newspaper reporters to synopsise articles from medical journals. Most of the data supplied are garbled, highly sensational and oftentimes untrue. The public, of course, is in no position to separate the gold from the dross or the wheat from the chaff. Some would have us believe that the public is too gullible. This is not true. We believe rather that the public taste has been debauched to such an extent that it hardly knows good from bad in a medical sense.

The Physician. The most natural source of supply in matters medical is the medical profession. The attitude of the latter, however, has always been staid and conservative. Its traditions heretofore have been against taking the public into its confidence because it feared the public might learn more than is good for it. The profession has possessed, as the *Saturday Evening Post* charges, a mine of useful information on medical topics, and yet, it has preserved till recently a policy of Sphinx-like silence. An awakening is taking place in all quarters. "Popular Medicine" is becoming the slogan of the day.

Not all our doctors, even now, are sold on the proposition. There is a vague feeling that it is "against ethics". This position, however, is hardly tenable. The distinction has been well made between "advertising", which is closed to the physician as an individual, and "publicity", which is open to the profession as a whole.

Instead of holding himself more and more aloof, the physician must strive to get closer to his public. He must try to reestablish himself in his old status of family doctor. Here he enjoyed the confidence as well as the confidence of his patients to the fullest. He gave as much as he received. He was in fact the medical advisor of his community. Even now, this status must be restored. The physician of today must awake to his responsibility to the public. He must endeavor to straighten out senseless notions and shaky dogmas. The longer he remains silent—the more firmly will the

quack and the cultist entrench themselves at his expense and the public be duped.

The Press. The main avenue of information, from the physician to the public, is through the medium of the press. The latter claims justly that it has received no cooperation from the physician in the past in its efforts to educate the public in matters medical. It has tried to give the public what it wants. Since the main avenue of authentic medical information was closed to it, it was forced to go afield and secure its data from questionable sources. However this may be, the press has been guilty of publishing many things medical that the public should not know and of leaving unpublished many things medical that the public should know.

Both the physician and the press have a guilt to share. At the present time, however, both are in a frame of mind to make amends. The physician is willing to draw upon his mine of medical information. The press is willing to publish it as authentic. Both will in a sense be gainers. The chief gainer will be the long-suffering public.

Medical Copy. During the past two years, the relations between our Department of Education and the press in Toledo have been very happy. All the Toledo newspapers are coming more and more to our Academy of Medicine as the fountainhead of authentic medical information. We might reasonably expect this of *The Toledo Times* because it is this paper which has featured for the past two years our daily medical essay under the caption, "Said by Toledo Doctors". And yet, it is true of our other newspapers as well.

Not long ago, *The Toledo Blade* desired the correct information on "Curing Deafness by Airplane". At another time recently, it requested a feature article on "Seasonal Diseases". On still another occasion, it asked for information on "Diseases Affecting the School Child". The same attitude is being followed by *The Toledo News-Bee*. The latter is collaborating at the present moment with our Department of Education on a forthcoming health supplement feature. Four pretentious issues will appear on four successive Saturdays. All the editorial copy will be written or censored by us. The whole-hearted indorsement of our Department of Education will be given to this enterprise because, in addition, no questionable or quack advertising will appear in its pages. This policy marks a radical departure from the newspaper policy of the past. It is a harbinger of better relations and better understanding on the part of the press, the public, and the physician.

Form of Essay. Granted that the physician has a message to convey to the public, what is the form by which it can best be conveyed? *The Saturday Evening Post* has accused us of "lacking the simple, racy English or the sense of form and accent which would make it interesting and attractive." It is necessary to solve this problem if we hope to get anywhere.

Brevity is the soul of wit. Our opinion is that every story on medicine for the Public should be brief. It should not be a treatise. Otherwise, it will not be read. We suggest the *analogy-form of "short story"* in medicine. One phase alone should be emphasized in an article. To capture public interest, an attempt in each instance should be made to open with some simple analogy. The crux of the essay should then follow by a natural transition. For example, the essay on "Knee Jerks" is introduced by a reference to "Venus' Flytrap". This is a plant which has sensitive hairs lining a cup-like maw. The instant an insect touches these hairs, the lid snaps shut as though by reflex action. The insect is captured and devoured. Again, "The Great Hernia Mystery" is opened with a reference to "The Man in the Iron Mask" who has furnished to this day one of the greatest mysteries of history. Again, the essay on "Hypnotism" is opened by the analogy of Ware's, "The Polish Jew", which first introduced Henry Irving to public notice.

The following brief essay entitled, "Medicine and the Barber Pole" is a striking example of the use of modern analogy:

"The latest Pulitzer Prize Novel, 'The Bridge of San Luis Rey,' recounts the incident of one twin brother, Esteban, seeking out the local barber to dress the wound of the other twin brother, Manuel. Many will ask why a surgeon was not sought. It will be remembered that the scene of the story is laid in 1714 in Lima, Peru. Those were the days of the barber-surgeons.

"The barber was once considered the surgeon of his community. He had the right to practice elementary medicine and surgery. Developments in medicine later forced the divorce of the surgical profession and the barber trade.

"The barber pole was retained by the barber as a link with the medical profession. It is a treasured memorial with him. The red band about the pole represents the bandage with which the barber stopped the bleeding in his operations. In European barber shops, a brass basin is still hung out at the door as a sign of the barber's olden functions."

The essay should be snappy and contain only highlights. Neither technicalities nor involved ideas should be introduced. Self-diagnosis and self-medication should be discouraged. The motto throughout should be: "See Your Doctor First".

Substance of Essay. The substance of the essay should include *Biography*, which is a reminder of the great names in medicine, as for example: "Lister and Antisepsis", "The Curies and Radium", "Leannec and the Stethoscope"; *History*, which relates some of the struggles of medicine, as for example: "Progress in Medicine", "Chemistry", "The Obstetrics Forceps"; *Anecdotes*, which reflect some of the incidents of medicine, as for example: "A Happy Accident in Medicine", "A Cause Celebre"; *Problems*, which have come up

for solution, as for example: "Smallpox Vaccination Campaign", "Animal Experimentation"; *Accomplishments*, which touch upon epoch-making topics, as for example: "Scarlet Fever Antitoxin", "The Nobel Prize in Medicine"; *Traditions*, which tend to recount unswerving principles, as for example: "Oath of Hippocrates", "Medical Ethics"; *Hopes*, which picture the conquest of disease in the future, as for example: "Cancer Problem", "Preventive Medicine", "Periodic Health Examination"; *Disease Aspects*, which are always intriguing to the public, as for example: "St. Anthony's Fire", "The Bleeder", "Color Blindness". And so forth—anything in fact that bears a sensible relation to the fabric of medicine can be made the substance of medical essay. All these phases lend themselves to happy pictures that make in their composite an interesting and instructive epic. They will be calculated to raise the stock of medicine both in the physician's and the public's estimation. They will sell themselves on their merits and do more than all the preaching in the world to counteract the fly-by-night fads and foibles that beset us today.

Strategy. To fight it, it is not always necessary actively to attack and belittle the cult and the quack. This often serves to advertise them more by making them "martyrs" to the "Great Medical Trust". We shall fight them best by establishing ourselves in the hearts of the public. To do this, we must educate the public in matters medical and thereby kindle a respect for orthodox medicine. We must let the public know what a noble heritage we have in medicine: its traditions hallowed by time, its sound principles, its safe and conservative policies, its triumphs, and in fact all about it that is calculated to intrigue public interest and capture public confidence. The public must be taught to turn at all times to the Academies of Medicine throughout the country as bulwarks and tabernacles and citadels of medical truth.

ACUTE SUPPURATIVE MASTOIDITIS, LATERAL SINUS INFECTION, TERMINATING IN LEPTO- MENINGITIS*

CASE REPORT

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I. S., A white male, ten years of age, was admitted to the hospital on February 28, 1928, his chief complaint being pain in the left ear and over the left mastoid, accompanied by fever.

Previous History: The patient had the usual diseases of childhood. The tonsils and adenoids were removed at three years of age, adenoids were again removed when eight years old. In February, 1926, a simple mastoidectomy was done on the right side, the ear continued to drain, and in November 1927 was reoperated with good results.

*Reported to the Marion County Medical Society, Nov. 6, 1928.

History of Present Illness: The onset of illness was February 20, 1928, with a severe cold and on February 24, 1928, pain developed in the left ear. On the following day the left ear drum was opened by the family physician. The discharge was very copious for a period of three days, during which time the pain had somewhat subsided. On February 28, 1928, the patient had a chill, followed by an elevation of temperature of 103 and was sent to the hospital where I first saw him.

Examination: The patient had a fair color, and appeared well nourished. He did not seem very ill. Temperature at this time was 103 F.; pulse 102; respiration 22.

Both pupils were normal, reacting to light and accommodation. No disturbance of motility of eye balls. The throat was surgically clean, teeth slightly carious, gums in good condition but covered with an exudate, breath foul. Both nasal cavities were normal and no clinical evidence of sinus involvement was found. A scar over the right mastoid was present as a result of former operation of this side.

Examination of the left ear disclosed a perforation in the posterior superior quadrant, pus in the external auditory canal, and great tenderness over the mastoid area. General physical examination was negative; Wassermann negative. White cell count was 21,000, with hemoglobin of seventy per cent. The condition was diagnosed as acute suppurative mastoiditis.

Roentgenograms of left mastoid shows no evidence of pneumatic cells on this side, and the picture is that of an empyema. Blood culture was taken and reported negative. A smear from the ear showed streptococcus as the predominating organism. A spinal puncture was not done at this time.

Operation: Mastoid found to be of moderate size and filled with granulations, broken down cells and pus. The sinus plate appeared unhealthy and was removed, the exposed sinus appearing of a good color and soft. The mastoid cavity was packed with iodoform gauze and closed with two interrupted silk-worm sutures at the top.

On March 2, four days after the operation, the patient had an elevation of temperature to 106 F., preceded by a severe chill. A diagnosis of lateral sinus involvement was made and the internal jugular vein was tied off below the facial, though not found diseased. The mastoid wound was then reopened, the lateral sinus was incised to permit free bleeding and the mastoid cavity packed with iodoform gauze, and left open. The patient returned from surgery in good condition. The next morning, March 5, the temperature returned to 99 F.; pulse, 50; respiration, 20. By the morning of March 6, the pulse had returned to 90. At this time all blood cultures had been reported negative.

On March 6, Dr. Clark reported four diopters

of papilloedema of the disc of the right eye and marked turgescence of veins, but no hemorrhage. The left eye was found to be similar to the right but less papilloedema. A diagnosis of intracranial pressure was made.

March 7, first complaint of headache. Very restless. Temperature at this time became suddenly elevated to 105 F, preceded by severe chill.

March 8, pupils respond very sluggishly to light. The right disc shows six diopters of swelling, extreme vessel tortuosity and increased retinal oedema, more marked in the right eye. The left eye shows new hemorrhages on the disc but no increase of nerve swelling or retinal oedema.

Consultation on March 10. Advised to explore the middle fossa of the left side with a probability of finding brain abscess.

March 10. Increase of hemorrhage over and about each disc, with oedema of each macula. Retinal veins engorged to the maximum. There was much more hemorrhage on the left disc than the right.

General condition of the patient at this time was very grave and getting worse. Chills and fever continued, with increase in intraocular findings. On the supposition that a brain abscess existed we proceeded to explore the middle fossa of the left side. This was done on March 12, under ether anesthesia, the incision being extended upward from the previous mastoid wound. Dura very carefully searched before opening, also the middle fossa of the brain, without the slightest evidence of abscess. The meninges showed some evidence of involvement. The cavity was packed with iodoform gauze, the wound left open and dressed in the usual way.

The blood having been previously typed, a transfusion of 350 cc of whole blood was given by the citrate method. No reaction followed the transfusion. The next day, March 13, the spinal fluid was reported under 28 mm. pressure, and clear. The white cell count at this time had dropped to 9,000.

On March 14, 1928, a positive Kernig, with stiffness of the neck and muscles of back, was noticed for the first time. The chills occurred daily, with elevation of temperature and daily morning recession until March 19, when the chills subsided and the temperature gradually returned to normal on March 30, 1928.

There was slight drainage, the wound filled rapidly, and the patient was released from the hospital on April 22, 1928.

Comment: This case presents some very interesting symptoms:

1. Blood cultures remained negative, although much caution was used in taking the blood, which was at the height of a chill, at the height of a temperature, and before the chill came on. This seems to be a common occurrence in cases reported.

2. The eye grounds were somewhat misleading as to diagnosis, and were different from those

usually found, and much more pronounced as to the amount of intracranial pathology present in this case.

3. Meningeal symptoms, usually early manifestations of meningeal involvement, were much delayed, although the condition was present some few days before operation.

It occurs to me that an early ligation of the internal jugular with equal treatment to the meninges will lessen the mortality in these cases.

The treatment other than surgery was symptomatic. I do not have much faith in serums in meningitis due to otitic origin.

UROLOGIC CONDITIONS ENCOUNTERED IN CHILDREN

B. A. Thomas and J. C. Birdsall, Philadelphia (*Journal A. M. A.*, November 10, 1928), state that children present the same urologic lesions as are found in the adult with few exceptions, and they can and should be subjected to the same thorough urologic examinations. Pyuria and hematuria are definite indications for an early and complete urologic study. This should include cystoscopy, chromo-ureteroscopy, ureteral catheterization roentgen ray examination, and, when indicated, ureteropyelography and cystography. Early diagnosis and appropriate surgical treatment will, in most instances, prevent extensive and permanent renal injury. No child, apparently, is too young to undergo such complete urologic investigation by virtue of the perfection attained in the manufacture of the modern cystoscope, designed for children and infants.

URINARY CALCULI IN CHILDREN

The report of urinary calculi in children made by Clinton K. Smith, Kansas City, Missouri. (*Journal A. M. A.*, November 10, 1928), embraces five cases of urinary calculi which occurred in a series of fifty-six cases in which complete urologic examination was done because of symptoms referable to the urinary tract. In the series there were no bladder calculi per se. Bladder calculi can be best regarded as merely a stopping place for renal calculi in transit, and therefore are of no special interest from an etiologic standpoint. The etiology of urinary calculi in children does not present any more special features of interest than in adult life, except perhaps to assist in clarifying or crystallizing our ideas concerning this subject in the adult. He says the more he studies calculi in children, the more the idea intrudes itself that it is in this period of life that one must look for the beginning of the calculi seen subsequently in the adult. In the child the problem of symptom interpretation and diagnosis remains the same as in the adult, with the exception that children are not generally thought of as having calculi. The author's personal experience is that calculi are found practically as often as in adults, if the same plan of observation is used. As in adults, calculi obstructing any part of the urinary tract give rise to pain. Pain of itself is not diagnostic of stone; it merely indicates obstruction, and unless the stone is producing obstruction of a calix, kidney pelvis or ureter, pain may be entirely absent. Conversely, pain associated with renal stone is sometimes due to ureteral obstruction and disappears after ureteral catheterization. Pyuria may be the only symptom. As in the adult, the roentgen examination is the mainstay in diagnosis. It should be made in all cases diagnosed as pyelitis or when hematuria or persistent-pain occurs. Children stand instrumental treatment much better than adults. Litholapaxy, except in young boys, is entirely practical. The open operation in the child does not present any special problem, with the exception that pyelotomy is more difficult than in the adult, owing to the fact that in the very young, especially, the pelvis is not easily accessible as it is situated mostly within the hilum of the kidney. In children the matter of recurrence is of utmost importance.

CAUSES OF DEATH IN MASTOIDITIS

In an effort to determine the relation of gastro-enteritis complication to mastoiditis, O. Jason Dixon, Kansas

City, Mo. (*Journal A. M. A.*, Oct. 27, 1928), has analyzed a series of cases coming to operation, covering a period of five years, which comprise, in addition to his own cases, those of a number of other otologists. The causes of death in mastoiditis are: meningitis, 13 (42 per cent); pneumonia, 8 (25 per cent); abscess of brain, 5 (16 per cent); sinus thrombosis, 4 (13 per cent), and post-operative shock,¹ 1 (3 per cent). There is an appallingly high percentage of infection of the middle ear and antrum in infants dying from every variety of acute, subacute and chronic infections (for example, broncho-pneumonia, long standing feeding cases, rickets, congenital syphilis and other conditions) in which there is a marked lowering of resistance and extreme debilitation. In these cases the ear involvement is obviously secondary and in many cases terminal, which can readily be shown not only from the gross appearance but from microscopic examination of the lining membrane and bone from the middle ear and antrum. The mortality rate in this entire series of operations is 6.25 per cent. Gastro-enteritis in infants has not yet been proved as a cause of death of mastoiditis. The mortality rate in infants with gastro-enteritis who had mastoidectomies is out of proportion to the usual mortality rate.

ROTOGRAVURE INK DERMATITIS

In fifteen cases of rotogravure ink dermatitis reported by Edward A. Oliver, Chicago (*Journal A. M. A.*, Sept. 22, 1928), the condition was characterized by an acute inflammation of the skin of the face, and occasionally of the neck, and swelling of the eyelids; in most cases it was productive of considerable pruritus. In one case it was seen on the scalp. Its worst periods always occurred early in the week, generally on Monday and Tuesday, although the irritation was always present until the offending agent was removed. The dry color used in the ink, para red, is undoubtedly the irritating agent.

VALUE OF BRONCHOSCOPY IN DIAGNOSIS OF MALIGNANT CONDITIONS OF LUNGS

Porter P. Vinson, Herman J. Moersch and B. R. Kirklin, Rochester, Minn. (*Journal A. M. A.*, November 10, 1928), point out the value of bronchoscopy in the diagnosis of malignant conditions of the lungs. Of the twenty-three patients observed previous to January 1, 1928, nineteen are dead, the average duration of life being four and a half months; one patient cannot be traced, and three patients are living and improving under deep roentgen-ray treatment. In early primary carcinoma of the bronchus the roentgenogram shows a typical unilateral hilar density with infiltrating borders definitely centered at the hilum, and an atelectatic or occasionally a bronchiectatic appearance due to bronchostenosis. The presence of one or both of these phenomena is sufficient evidence on which to recommend a bronchoscopic examination. Malignant lesions are common in the tracheobronchial tree. The chief symptoms are cough, expectoration, hemoptysis, loss of weight, dyspnea, pain in the chest, fever and hoarseness. The most common manifestation is evidence of partial or complete occlusion of the bronchus. Tumors of the tracheobronchial tree are highly malignant. Treatment is not satisfactory but deep roentgen-ray exposures may be helpful. Accurate clinical diagnoses were made in less than half of the cases observed. Bronchoscopy is the safest and most exact method of making an early diagnosis.

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EDITORIALS

TOO MANY CAESAREAN SECTIONS

In recent years the operation of Caesarean Section has become a very frequently chosen method of delivery. The laity, the slightly trained obstetrician and the general surgeon have all contributed toward increasing the percentage of deliveries by this method. A few women, misguided by statements often made by doctors and misinformed as to the risk involved, and desirous of avoiding the pains of ordinary childbirth, sometimes are requesting that their delivery be by section. This fact is greatly to be deplored. In the general practice of medicine as well as obstetrics the doctor who permits his patients to dictate their treatment is falling far short of his duty and is degrading the art and science he is expected to uphold. Then, the man who had a little extra training in obstetrics and is at the same time the host for the "bacillus operatorium" is prone to be led easily, and with greatly insufficient indications, into the operation of Caesarean Section.

The general surgeon, who occasionally is called to see an obstetric case, oftentimes has no recognized skill in obstetrics other than his ability to do a laparotomy. He is rarely if ever able to skillfully estimate the pelvic measurements nor the size of the baby. Furthermore, he is very apt to fail in a precise diagnosis as to presentation and position. He often lacks the ability to carry out recognized obstetric procedures other than laparotomy. Possibly an alteration in the position of the child, or the application of an hydrostatic bag or gauze in the cervix, or a skillfully performed forceps delivery, or internal podalic version would save the woman from a laparotomy, but the general surgeon is rarely able to ascertain these facts, and if ascertained is, in most instances, quite incapable of carrying out such procedures properly.

Caesarean Section is spectacular. Many operators like the spectacular. Teaching obstetricians find no difficulty in filling their operative amphitheaters when they have announced their intention of doing a Caesarean, but the same physicians and students hesitate to go far to see a skillfully performed normal delivery.

Eclampsia seems to invite the scalpel. Only recently the writer was told in consultation at the bedside of an eclamptic, "something must be done", and it became necessary to explain that there were

many things which might at times be done for the eclamptic other than Caesarean Section. True, the time comes in some cases of eclampsia where Caesarean is indicated, but he who thinks only in terms of Caesarean for eclampsia is obtaining a much higher mortality than is necessary in the light of our present obstetric knowledge.

It also is regrettable to note that a very large percentage of Caesarean Sections are being done by operators who seem not to have heard of the "low flap" method, or of the "extra-peritoneal" or the "transperitoneal", as advocated by Hirst and recently modified by Broadhead. They are still going ahead with the classical method when obstetricians have proven years ago that there are other types of sections which give far better results in the potentially infected cases.

Rudolph Holmes¹ of Chicago says, "Caesarean Section is far more dangerous for the woman than spontaneous labor, even an operative delivery of some difficulty. The sum total of discomfort, distress, malaise, etc., associated with Caesarean section is as great or greater than the inconvenience and pain of labor."

C. Jeff Miller² says that "when once the limitations for Caesarean Section are transcended, few abdominal operations carry a higher potential mortality, and that the operation must not be lightly undertaken on careless indications"

Mosher³, ex-president of the American Association of Obstetricians. Gynecologists and Abdominal Surgeons, says, "Maternal mortality is increased by leaps and bounds through rupture of the membranes, attempt at forceps, induction, version, craniotomy, or even frequent examinations per vaginum, previous to the section."

Weltz⁴, in reporting on Caesarean Section in Detroit in 1926, says there was a maternal mortality of 13 per cent.

Hull⁵, of Jefferson Medical College, says, "The mortality in Caesarean Sections is not decreasing, and the man who attempts to deliver a patient by the abdominal route must keep in mind that he is subjecting that patient to an abdominal operation which is never without danger."

Montgomery⁶, of Philadelphia, says the Caesarean Section has a 2 to 3 per cent. mortality, and that late section of the classical type has a mortality of 20 to 30 per cent.

J. Whitridge Williams⁷ is convinced that "Caesarean Section is abused throughout the country and it is the cause of many unnecessary maternal deaths".

Blacker⁸, of England, says that "under the best conditions Caesarean Section has a 2 per cent. mortality which is augmented to 10 per cent. when the operation is done late in labor, and 27 per cent. when done after attempts at delivery from below".

Polak⁹ says that "while surgical obstetricians have widened the indication so that they include almost every conceivable difficulty, the obstetric

surgeon is limiting the indications in both his practice and his teaching, placing its election on well-grounded indications."

Thus one could go on quoting almost indefinitely from leading surgeons the world over and repeatedly find warnings against the too frequent resort to Caesarean Section, and words of warning as to the high mortality which must and does attend this major obstetric procedure. Therefore, it behooves the general practitioner who is still doing such a large percentage of deliveries to hesitate before deciding upon a section for his case and before calling a general surgeon or surgical obstetrician to see his case. On the other hand, it behooves the general surgeon and surgical obstetrician to study the records of the large clinics and not abide by the decision of an operator with but a small group of cases, and to give due heed to the warnings from leading obstetric surgeons that Caesarean Section must be done only where there are definitely proven indications, and only then with the full realization that elective Caesarean Section in the hands of the best operators still gives a mortality rate not to be overlooked and that late Caesareans and especially those following other attempts at delivery are followed by a very high mortality rate. Furthermore, the man who is doing Caesareans should be capable of recognizing the indications for a Caesarean Section differing essentially from the so-called classical type, and should be able to perform that type which gives his patient the best possible chance to recover.—M.

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NON-CLOSURE OF ACCIDENTAL WOUNDS

Physician and laity commonly take it for granted that the most important thing to do for a wound is to sew its edges together, but the immediate closure of an accidental wound is often dangerous to life and may lead to extensive disfigurement and crippling of the injured part. The writer has removed hair, bits of cloth, shot gun wads, and even a tooth from the depths of wounds which had been tightly closed.

The essentials in the treatment of a recent wound are haemostasis and sterilization. If these are attended to, closure with a minimal amount of scarring will almost take care of itself. Stitches devitalize the tissues and spread infection.

The complete sterilization of an accidental wound is often impossible in an office or home. It may require a general anesthetic and hospital facilities, and may even then be impossible. But if the wound is cleansed mechanically by wash-

ing with sterile water or sterile salt solution, and by mechanical removal of all foreign matter and devitalized tissue, and then left wide open under a wet dressing it will heal with surprisingly few signs of infection and a minimal amount of sloughing. After a few days, when danger of infection is passed, it can be closed by sutures. This, however, is frequently unnecessary, and the final scar may even be better when no sutures are used.

The reader will notice that we have mentioned no antiseptics whatsoever. The present tendency is not to use antiseptics on the tissues but to rely on mechanical cleansing. No antiseptic except an escharotic-like carbolic acid or formaldehyde will completely sterilize a wound. The weaker antiseptics may kill some but not all of the bacteria, and they so injure the tissues that the remaining bacteria find good opportunity to develop. Tincture of iodine is especially harmful, because it produces a coagulum under which infection may be confined. It is to be remembered that no antiseptic in contact with the tissues retains its power very long. Hypertonic salt is probably as good a solution for saturating the dressings as any.

Open treatment, especially, is indicated for lacerations of the scalp and for deep cuts and lacerations anywhere. When to use it for compound fractures, or for wounds exposing tendons, or opening joints is a matter for surgical judgment. The treatment of these injuries should not be attempted except from dire necessity by anyone but an experienced surgeon, and in a hospital. By proper technique, such wounds often can be completely sterilized, if treated within the first eight hours after injury and safely closed.

The general rule governing the closure or non-closure of any wound is that closure should not be done unless sterilization is certain.—G.

LOAN FUND NEEDED

This last fall, at the Indiana University School of Medicine, three students who had been accepted as members of the freshman class of the School of Medicine found it necessary to withdraw at the last moment because of failure to get their year financed. At the middle of the fall semester a member of the freshman class of the School of Medicine told Dean Myers he was compelled to withdraw because of failure of funds. Of students who complete the medical course, some spend so much time working at forty cents per hour to stay in school that their work in school suffers. They do passing work but not the superior work of which they are capable, and which is so important for their future practice.

This situation is general and various plans are being devised to meet it. One great school of medicine refuses to accept students who cannot show resources sufficient to finance the four year course without outside work which would cut in on the study time required in the medical course. This plan bars the poor boy from the medical

profession and possibly robs some community of a resident physician. In Vermont, certain isolated communities raise a fund of \$1,500 or \$2,000 to help defray the expenses of some talented young man of the community, through medical school, with the agreement that on graduation he shall locate and practice in that community for a term of years. In Tennessee, at Memphis, the medical course is being organized in three-month units so a mountain boy with savings that will carry him three months can complete that unit of work and then drop out to earn money for another three months period. This is done on the theory that the boy from the mountain home will go back to the mountain community to practice. A mission medical school at Loma Linda, California, arranges its course in month units, working its students in pairs. This month "A" goes to school and "B" holds down a job. Next month the course is repeated. "B" goes to school and "A" works.

At many schools there are loan funds for students. Indiana University has had a small loan fund for about twenty years. Loans are made to students by a loan committee on a bankable note, i. e., a note endorsed by some responsible individual not a member of the faculty. These loans, in amounts not exceeding \$75.00, are made at 3 per cent. interest until due, but 5 per cent. from maturity. Though slight losses have occurred through deaths, the interest charge, though small, has been sufficient to keep the principal intact. This fund is too small, and the amount available for any one individual is too small, and the time of the loan too short, to be of any use to medical students.

A student must have completed high school and two full years of specified collegiate work to get into medical school. The medical course is then five years long, including a year of hospital work. For our medical students, we should have a fund from which, on recommendation of the Dean and approval of the Loan Committee, loans may be made up to \$500 per year, for a period of one to six years, on notes at 3 per cent. interest till maturity and 5 per cent interest after maturity until paid, signed by the student and one endorser whose credit rating is obtained from the bank of the endorser's town and county, and found satisfactory. Allowing one year after the five-year medical course for the young graduate to become established, payments on the loan should begin in or before six years. To be adequate, it is estimated there is need of from \$8,000 to \$10,000 per year for six years; say a total of \$50,000 to \$60,000. Members of the medical profession are asked to direct the attention of individuals or families without direct heirs, to this need and this opportunity to dispose by gift or bequest, of their estate at some specified time, in such way as to be directly helpful in education of medical students, and indirectly helpful to communities through the service of medical graduates. Experience extend-

ing over twenty years leads to the conclusion that a fund so established and managed will continue intact.

B. D. M.

THE HIGH COST OF MEDICAL CARE

In discussing the subject of the high cost of medical care there are altogether too many people who seem to think that the principal part of the expense of illness is due to large medical and surgical fees. The truth of the matter is that if the character of the services and the return on the actual investment is considered the medical man usually is poorly paid. It must be remembered that the physician's stock in trade is his knowledge and training, which has been secured at not only a very large money expense but at the expense of from five to six years of time during which nothing was earned. Medical and surgical services possess a value not to be measured by dollars and cents, though as a working basis some fairly definite schedule of fees must be followed. There was a time when the physician's fees were not considered as being a matter to be dealt with in a critical way, and the fees then were only a little less on the average than they are at the present time, notwithstanding the very marked change in the economic position of nearly every person following other vocations, and their increased earnings.

The fact of the matter is that there are other factors that enter into the high cost of medical care and not the least of which is the present tendency to make all sickness of any consequence a hospital proposition. This change in the desire on the part of the public to have better and more comprehensive attention than can be secured in the home is encouraged and stimulated by the attitude of the physicians who like, for personal reasons, to have work centered in hospitals, not alone because of the supposed better attention received but because of the convenience to the physicians themselves. This hospitalization is an expensive luxury in many cases, as illustrated by an incident, not unusual, that has just come to our attention. A man had a bruise in the region of the clavicle, at first thought to be insignificant, but which later developed into a large abscess. The physician consulted advised him to go to the hospital. The treatment consisted of a free incision, resulting in prompt cure. The patient was in the hospital one week, and received a bill from the hospital for \$97, which included room, board, operating room expenses, special nurse for one day, x-rays, laboratory, dressings and drugs. The physician's bill was \$20, which included lancing the abscess and a couple of dressings.

The questions arise, "Why did not the attending physician encourage the patient to remain at home? Was it necessary to have the x-rays, laboratory examination, operation under general

anesthetic, and a special nurse for twenty-four hours? Furthermore, why do hospitals charge for dressings, drugs, blood count, and even telephone calls?" In the case cited, the physician's fee was modest, but in reality wasn't he responsible for a large expense, much or all of which may have been wholly unjustifiable? Perhaps the attending physician sent the patient to the hospital as a matter of convenience to himself, and it may be that the hospital, following a rigid rule, and in the interest of protection of the hospital as well as the patient, was responsible for the extras. In the final analysis, isn't it true that we are subjecting altogether too many patients to hospitalization who could be given efficient and satisfactory service at home at modest expense, and isn't it equally true that hospitals, through a mistaken notion of efficiency, are subjecting patients to too much service which goes under the head of extras for which the patient has to pay altogether too much? In the discussion of the high cost of medical care all of these various factors must be considered, and it certainly is worthy of thought that much of the expense can be cut down in a very large proportion of cases without diminishing efficiency and without cutting down the compensation received by the physician which already is low enough. Why not cut out a good many of the frills, and why not quit considering some of the routine services as extras for which an extra charge can be exacted from the patient? The patient should have everything that is necessary for the proper consideration of his ailments, whether in the way of diagnosis, treatment or care, and the well-trained physician should know what is necessary, but why should he arbitrarily tack on a lot of superfluous service and expense?

COMPLETE MEDICAL AND SURGICAL CARE AT REDUCED RATES

At the editors' conference held in Chicago last November, a speaker announced that already there are five hundred lay organizations that have been promoted to care for medical ills at a cost less than that charged by members of the regular medical profession. In this connection it may be well to remind our readers that we are informed from a reliable source that in Chicago a lay organization is in existence and functioning to the extent of furnishing all medical and surgical attention for eighteen hundred patients per day on the average, and last year made a net profit of \$100,000.

The organization employs medical men on salary, the lowest salary being three thousand dollars per year, and the highest, given a surgeon, being ten thousand dollars per year. The service includes everything that is needed for diagnosis and treatment, and the president elect of the A. M. A. says that the service is as good or even better than that ordinarily furnished by the regu-

lar medical profession. The enterprise was started by some wealthy and philanthropic men who saw the need of furnishing the highest grade of medical and surgical services to the great middle class that cannot pay regulation fees as charged by physicians, surgeons and laboratories. These philanthropists say that they are quite willing to turn the enterprise over to physicians, providing it will run as it is now.

What has been done in Chicago is an indication of what will be done in every city in the country unless the medical profession solves the problem of furnishing the very best medical and surgical attention to the medium class of people at fees that can be paid without hardship. It may be argued that such institutions will be imposed upon, but with careful scrutiny of patients there need be no more imposition than now is practiced at the free clinics. In fact, it is quite possible that some of those who now go to the free clinics will prefer to go to pay clinics where they can get good service and at a price within their means. At the same time, the well-to-do will be obliged to pay the regular fees just as they do now.

The trouble with our present system is that we provide for the indigent and very poor, as also the very rich and well-to-do, but we make scant allowance for the great middle class which really makes up the bulk of our population. We may hate to have lay persons indirectly engaged in the practice of medicine, but it is a foregone conclusion that unless we do something to correct the present inequality we are going to find out that the public will take matters in hand and to our everlasting discredit and financial loss. Already the Julius Rosenwald fund has provided for an expenditure of thirty million dollars within a specified time, every dollar of which is for the purpose of securing medical aid at reduced cost for the middle classes. The fund will be spent in establishing clinics and hospitals.

It may be said in passing that the furnishing of the highest class of medical service to all the people all the time is an obligation which falls upon the medical profession, and it should be controlled by the medical profession, and not lay persons. Some may say, "How are you going to do it?" The answer is, by organizing our medical societies for business purposes. It doesn't mean a free clinic, for it is the community's obligation to care for the indigent and the poor. However, the economic status of the individual should be taken into consideration and the fees made accordingly. Services for the indigent should be paid for by the community. Such an institution can be made to pay and pay well, without forcing a hardship upon those that are served. In fact, a very large percentage of the income will come from patients who now are treated gratuitously. The physicians who serve such an enterprise will be required to devote a definite amount of time to the institution, and will be paid for his services

on an equitable basis. There will be no interference with private practice.

THE AMATEUR INVESTOR

(Condensed from *The Forum*, September, '28)

J. B. E. JONAS

This is the financial history of a married teacher who began his professional career on a salary of \$200 a year, which was raised *by very slow degrees* until, after twenty-seven years of service, it reached \$4,200—and who by constant and systematic saving has accumulated what in probate parlance would be called “an estate of over \$10,000”—well over \$10,000, let it be added.

I inherited neither money nor investment sagacity. Accordingly, I had to pass through the very painful, but perhaps wholesome, experience of losing my first savings through utter and abysmal ignorance of investment matters, sheer stupidity, and a compelling reticence to ask aid or advice from others.

Then came a god-send. I began using the “Investment Service” advice of a magazine and from that moment my losses ceased, my money began to “work” dependably, regularly, constantly—twenty-four hours every day, three hundred sixty-five days a year, as money should. My savings began to count and accumulate, for I had always saved, even on my lowest salary.

Would-be savers, disheartened by the cruel, but inevitably necessary initial sacrifice, will be stimulated to fresh vigor when they contemplate the astounding productive power of money. One hundred dollars monthly invested at six per cent compound interest will grow in twenty-five years to \$67,977.15. Benjamin Franklin's famous bequest of \$5000 to the city of Boston grew in one hundred years by compound interest to \$391,168.68. At three per cent, one dollar put at interest at the beginning of the Christian era, and compounded annually, would now amount, in round numbers to \$3,000,000,000,000,000,000,000,000. For the same time and rate, one dollar at simple interest would amount to only \$58.81. Moral: Save your interest!

In the early stages of my financial development, I accidentally learned that with a very small “nest egg” as a foundation, it was possible to purchase a bond of a much larger value, and on the bond as collateral, borrow the difference from my bank, usually at a lower rate of interest than the bond paid. That is to say, for \$150 cash plus \$850 borrowed from the bank, I could buy a \$1000 bond. I would then pay off my note in installments as I was able to, month by month, and that done, buy a new bond in the same way. By leaving my bonds at the bank I soon created an excellent borrowing credit on which I could draw at any time in ever increasing amounts. The plan possessed these distinct ad-

vantages: (1) It always confined my investment purchases to securities of which my bank approved, and over which it then kept a constant and vigilant oversight. (2) It enabled me to avail myself of any exceptional investment opportunities, even if I did not have the ready cash at the time. (3) It was a great incentive for saving, for I was naturally eager to pay off my loans as soon as I could. (4) I received more interest than I paid.

These two principles—(1) advice from the “Investment Service” of a good magazine, together with bank approval of securities, and (2) bank loans on them—are the foundation pillars and corner stones upon which my financial edifice has been built.

In more detail, I subjoin some of my investment practices. These have all been learned and tested in the hard school of experience and may serve as practical suggestions.

1. I never buy a security without first getting it approved by the Financial Editor of a magazine and accepted by my bank as collateral. This is my invariable and inexorable test of safety. My maxim is: “What is not good enough for my bank as collateral is not good enough for me as an investment.”

2. I purchase a variety of securities: bonds (government, public utility, real estate, and industrial), preferred stocks (chiefly public utilities) and, up to the present, very few common stocks. Within each group I try to diversify them as to geographic location, company, kind of product, etc.

3. I always buy on the partial payment plan, mainly by borrowing from my bank, as indicated above.

4. I always keep my securities at the bank as collateral, often having four, six, or eight times as much as my notes require. This enables me to take up loans at any time I require them. This also keeps the bank constantly interested in, and vigilant over, my holdings, reporting any changes, cautions, or calls, and retaining them in safe keeping.

5. I very rarely sell a security, except when it is called, or, in a few cases, on an exchange for some other security. This is no doubt a weakness, for I hold bonds that sell well above my purchase price; but I do not sell chiefly because I am too busy to follow market quotations, and therefore haven't knowledge enough of what these issues may do.

6. I never speculate, buy on margin, pyramid, or go into doubtful real estate ventures. I have, of course, bought many securities that have gone up in price, and I naturally like to buy as low as possible. But I am purely an investor and my primary interest lies there. If my investments pay their interest and dividend returns promptly,

regularly, and reliably, are good collateral, and are paid off when due, I am satisfied.

7. I purchase only high-yield securities, higher at least than my bank rate of interest—provided, always, of course, that I have been fully assured and am entirely satisfied of their safety. "Safety first and always!" While this is a good general working rule, it does not by any means follow that every low-yield security is safe and every high-yield security is not. My experience has amply proved this. I have nothing under six percent. Most of my investments yield seven or eight percent.

8. I always buy a much larger block of investments than I have available money for at the time, by taking a bank loan or buying on the partial payment plan. Once I bought \$35,000 worth of Bolivia 8's on \$350 in Liberty Bonds.

9. I never take securities in a new venture. Unless a company can show satisfactory financial history—success, earnings, background, assets—I leave it severely alone. I wish somebody had impressed this rule on me when I began. And I wish every novice who reads this article would make it his first and fundamental principle. It would save millions.

10. Finally, I am fanatically punctilious in all money matters. I keep every promise; meet every obligation meticulously. I have never overdrawn my bank account in my life. I meet every payment on the dot. My bank can depend on my words, and acts accordingly. It pays.

In conclusion, let me state that I have a careful system of bookkeeping. I have kept, in uniform ledgers, a strict and accurate account all my life. I can account for every penny that has ever passed through my hands. My father inexorably required it when I was a boy. It became a habit. I shall not expatiate on the value of an account, except to say that my account has saved me many dollars, has kept me out of much mischief, has fostered much that is good in me, has been a great incentive to thrift, and, as a record of reference, has been of inestimable value and pleasure. No more than one could imagine a large business corporation without its files and accounts, should any private individual fail to keep an account.—*The Reader's Digest*, November, 1928.

THE Bureau of Publicity of the Indiana State Medical Association deserves an enormous amount of credit for not only the amount but the character of work being done in preparing and releasing health articles for publication in the lay press. These releases are prepared for each week, and represent an amount of time, energy and thought that the average physician can scarcely appreciate. The fact that these men get no publicity or compensation of any kind whatsoever from their work makes their service all the more creditable and praiseworthy.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

WE hope the councilors and officers of the Indiana State Medical Association will visit a large number if not all of the county medical societies throughout the coming year.

ALL children should be immunized against diphtheria, and this is especially true as pertains to the pre-school child. How many physicians in Indiana are doing diphtheria immunization work?

WHY do physicians so commonly say that a patient has "temperature" when they should say that the patient has some fever? All persons have a temperature, but not all have an increase of temperature or fever.

ONE reader of THE JOURNAL wrote us a few weeks ago, saying "why don't you print something for the little fellow?" We thought we were doing it, but perhaps we are omitting to print cross-word puzzles and bedtime stories.

IT is reported that an Indiana doctor made nearly a million dollars in stock speculation during the past year. He celebrated by buying a yacht and a Rolls-Royce automobile. Same old story—come easy, go easy,—and the get-rich-quick like to splurge.

REMEMBER that on and after February first you are delinquent if your dues in the Indiana State Medical Association have not been paid. Delinquency means loss of the benefits of the Association, not the least of which is defense in malpractice suits.

AGAIN we desire to remind our readers that they are asked to follow the findings and recommendations of the Council on Pharmacy and Chemistry of the A. M. A. in prescribing new and nonofficial remedies. In no other way can you be sure of playing safe.

COUNTY medical society secretaries will do well to arrange medical programs so that they will be practical. The outstanding feature of medical societies is to make better medical doctors as well as

promote friendly intercourse and acquaintanceship. By all means get the young men started.

THE department stores are now advertising ultraviolet and infra-red ray lamps for the promotion of health. We thought it would come to that. It is another encouragement for self-prescribing with the patient employing an untrustworthy physician and using remedies that potentially are capable of producing very great harm.

How unfortunate it is that many medical men do not know how they bore an audience with long and rambling addresses. A very intelligent and widely-famed medical man can spoil a real message by taking too much time in delivering it. Make your medical papers and talks snappy and to the point, then you may be asked to come again.

PERSONAL contact is a great factor in keeping up interest in the medical society. We should cultivate it. Every person likes the "glad hand", and he likes to be helped out of his trouble. A spirit of friendship and helpfulness in our medical societies goes a long way toward creating a medical profession that is proud of itself and is looked up to by the public.

It makes us smile to hear some physicians say that diphtheria immunization is generally practiced throughout Indiana. Lord bless you, the surface has only been scratched! A large percent of the population never heard of diphtheria immunization, and that is due to the fact that family physicians are negligent in preaching the gospel and practicing what they preach.

FUNDS are needed to finance worthy students who unexpectedly find themselves in need of money to continue their studies in the medical department of the Indiana University. The funds will be loaned at a fair rate of interest, and both principal and interest will be repaid. Here is hoping that some reader of THE JOURNAL will find a benevolent and philanthropic person to supply the need.

WHOOPEE! Calves' liver is ninety cents per pound in some Indiana cities. It is now the "swagger thing" to order liver and bacon, but we can remember when butchers gave liver away for the asking, and anyone who admitted eating fried liver was considered as following a low scale of living. Times have changed, and as one wag says, "Willie's pants are now used for grandma's golf knickers".

DON'T forget to write to our executive secretary, Thomas A. Hendricks, 804 Hume-Mansur Building, Indianapolis, concerning your trip to Portland in July to attend the annual session of the A. M. A., and give information as to whether

or not you will be interested in making up an Indiana party to occupy one or more Pullmans that will go through to Portland, perhaps stopping enroute at scenic points.

FIRST it was coffee without caffeine, then tobacco without nicotine, and now it is coffee and tea without tannin, in order to promote health! As usual, physicians are asked to recommend these products, and not a few thoughtless physicians are caught in the trap, even though without investigation the thought should appeal to them that the whole propaganda is bunk and disseminated for commercial reasons only.

EVERY physician encounters the kicker or the patient who cannot be satisfied. The kicker generally owes the doctor and uses his complaints as a means of either getting out of paying anything, or at least delaying the payment, for services rendered. The sooner the physician gets rid of such patients the better. Cut him off the patron list, and be thankful that he consults a confrere—but have sympathy for the confrere!

WE wish that every one of the readers of THE JOURNAL would answer two or more of the advertisers in THE JOURNAL, and in particular those which ask for replies, either for the purpose of sending samples or literature. In this way the fact will be impressed upon the advertisers that THE JOURNAL's advertising is read. We also urge patronage of advertisers, for we exert much care to accept advertising from only those that are trustworthy.

A DRUGLESS healer says, in an advertisement, "Why should the government back the allopathic school of medicine against all other schools any more than one religious sect against another?" The answer is easy. The government recognizes that the person who is educated and trained in regular medicine is well-balanced. All of the others are lop-sided and consequently deserve to be thrown in the discard when considered for all-round medical service.

IT cost one Indiana physician several hundred dollars one year because he did not pay his medical society dues before February first. He was called upon to defend a malpractice suit and not being in good standing in his county medical society because he had not paid his dues on time he was refused defense by the Indiana State Medical Association. Thus, delinquency in the payment of medical society dues may prove to be very expensive. Don't let that happen to you.

It is reported that the New York State Medical Society employs a physician for all time service at a salary of eight thousand dollars per year and expenses for legislative work and cooperation in

building up county medical societies. We are informed that the money is well spent. The Indiana State Medical Association could well afford to have an all time representative during the period that the legislature is in session, and this in addition to our regular representatives.

It requires a lot of self-control to refrain from punching the nose of the man or woman who takes an hour or more of a busy physician's time in making a careful examination and giving a trustworthy opinion concerning conditions found, only to be met in the end with the remark by the patient, "Why, doctor, I did not suppose you ever made a charge for an examination, and I do not think I should be called upon to pay you unless you render some service." Unfortunately there are a few such idiots still living!

WE believe that any city or town in Indiana that supports a Chamber of Commerce is able to check the development and operation of medical frauds in that locality. We believe it to be the duty of county medical societies to take out a membership in these Chambers of Commerce with the avowed purpose of having a voice in suppressing fraudulent or deceitful practices not only in business but in the profession. A medical society can secure a leverage through a Chamber of Commerce that could not be secured in any other way.

THIS is the last month during which medical society dues can be paid without penalty. February 1st is the deadline, and after that date those physicians who have *not* paid medical society dues are *not* in good standing, and *not* entitled to the benefits of medical defense and the other advantages that go to the member in good standing. To be without medical defense is like playing with fire and may prove expensive, as some physicians in Indiana have found out to their sorrow. It costs money to hire lawyers and pay court fees, even if you win.

MANY economic subjects are worthy of discussion before our medical societies. The practice of medicine may be a profession, but it also is a business. We do not believe that any man is practicing medicine for the pure love of it. We may "kid" ourselves with the thought that we are doing a great humanitarian work and that if we are not rewarded in this world we will be in the next, but we generally awaken from this dream when the grocery keeper insists that he must be paid for what we eat and the banker notifies us that our notes are past due and will not be renewed.

MOST of the health talks given before clubs and other lay organizations ought to be frowned upon for the reason that they are given, as a general thing, by a lay person, or by some physician hanging on the fringe of a reputable medical profes-

sion, and not infrequently the speaker is in the employ of some commercial enterprise that in a subtle way is attempting to exploit itself. The members of the Woman's Auxiliary can do a fine piece of work if they use their influence to prevent women's clubs, and in particular parent-teacher's clubs, from being imposed upon by false prophets in the health education game.

WE desire to remind our readers again and again that our advertisers should know that *THE JOURNAL* is read from cover to cover by most of the physicians of Indiana, so why not answer the advertisements, even in the way of asking for samples or literature, or with a note to the effect that you are using the products advertised in *THE JOURNAL*. It will make your advertisers feel better, it will help *THE JOURNAL* and in turn will help the readers, for when all is said and done *THE JOURNAL* in its present form could not be published were it not for the added income which comes from advertising.

PHYSICIANS are notoriously lax in supporting the enterprises which should receive their support. This is true of medical societies, medical legislation, medical ethics, civic affairs, and even the enterprises in which they invest their money. This should not be true, and is a condition hard to explain. However, it is not a condition that cannot be corrected. January is the month set apart for new resolutions, and one of the resolutions that should be made by every physician is to the effect that he will give his unwavering support to those things which he should support from civic pride, sentiment, or from a purely business standpoint.

AN eastern man who has visited all of the medical colleges of the United States and Canada and made a critical examination of equipment and character of work done, says that the three leading medical colleges of America are the Indiana University, the Pennsylvania University, and McGill University. Take off your hats you Indiana doctors who have not appreciated what the state university has been doing, and be proud of the medical department of your university. Not only swell with pride, but put forth every effort to increase the usefulness of the medical department of the university by encouraging the present legislature to donate liberally for its support.

IN the *Journal of the A. M. A.* for November 24, 1927, appears an article by Rice concerning two cases of rabies in humans. Case number two was one that was treated in the Indiana State Laboratory, and the death occurred in 1927 instead of 1928 as given in the article. The dog was a stray that got away and has never been seen since, so it was not examined in the State Laboratory or anywhere else so far as known. The case is a classical example of the danger of the bite of

a stray dog, especially in the presence of an epidemic of rabies such as we are having in some parts of the state now. It is a part of wisdom to treat people rather freely with antirabic serum if bitten by a stray dog.

THE governor of Louisiana asked for the resignation of Dr. Oscar Dowling, health officer of Louisiana for eighteen years, but Dr. Dowling refused to send in his resignation. The legislature then passed a law calling for the reorganization of the State Board of Health, and terminating the tenure of office of Dr. Dowling, but he concluded to fight, and the matter was carried to the supreme court which upheld the actions of the legislature and governor. Just why Dr. Dowling should have attempted to continue to hold a job when there was such apparent general sentiment against him is hard to understand. There are some features of this scrap which remind us of the old saying, "The chickens go home to roost."

THE United States Department of Agriculture announces that there are jobs open to those who will learn how to collect wind borne pollen so much in demand now for making extracts with which to treat hay fever patients. The collection of pollen must be carefully and intelligently done, and if the collector is not a botanist it is necessary that he be thoroughly instructed by a competent person. A copy of the new publication, circular Number 46 C, entitled "Methods of Collecting and Preserving Pollen for Use in the Treatment of Hay Fever" will be found of value and interest to prospective pollen collectors and may be obtained by writing to the United States Department of Agriculture, at Washington, D. C.

THE State Board of Health has a new all-time health officer's bill that will be introduced in the present Indiana legislature. We learn from reliable sources that the bill if made a law will put the city health department under the control of the county. How will Evansville, Terre Haute, South Bend, Fort Wayne, and other cities, like that? There are some other features in the bill that even some of the public health officers decline to approve. It would be well for the county medical societies of Indiana to consider carefully all of the provisions of the new all-time health officers bill, with a view to eliminating bad features, as also preventing the development of a sort of autocracy on the part of the health officers of the state.

THE Christmas season gives opportunity to a lot of fool parents to give their children toys that are dangerous to handle. The small boy with a new knife almost invariably whittles upward, and not infrequently if the blade hits a knot and slips off, the face and even the eyebrow is penetrated with the blade. The air rifle is still more danger-

ous, not so much to the user as to others. It may kill if fired at a person at close range, and probably every busy eye specialist who has been in practice for several years has seen numerous eyes that have been injured or lost through the use of the air rifle in the hands of young America. There should be a law prohibiting the sale of air guns, or better still, a law preventing their manufacture.

It is a little amusing to note how some treatment considered a few years ago as empirical finally has come into its own through investigation and experience, so that now we have a scientific basis to account for good results. There was a time when codliver oil was given to almost every patient as a reconstructive agent, but eventually it fell into disrepute because many physicians said that codliver oil was a nasty preparation which upset stomachs and never did compare to meat, cream and eggs. Now codliver oil is popular again, and for purely scientific reasons. One of our internists has been bold enough to say that he would be perfectly willing to trust to codliver oil and orange juice as the only therapy he would prescribe for tissue building.

WILL we ever get over the foolish and dangerous habit of uncovering the head in inclement weather, particularly in the winter, in doing reverence to the dead or living? The illness of the King of England dated from a severe cold contracted as a direct result of standing bare-headed in the rain at the grave of the Unknown Soldier. How often do we hear of men contracting severe colds and even fatal illnesses as a direct result of uncovering the head in stormy weather out of reverence, or as a compliment to ladies. An ounce of prevention is worth a pound of cure, and we ought to do away with the silly custom that seems to require exposure in inclement weather of a particular portion of the body that is so susceptible to such ill effects and the result of which may be dangerous to life.

UNTIL recently we were not aware of the fact that any practicing physician, anywhere in the United States, with an honest desire to maintain an honorable reputation, could think of employing a press agent to advertise himself. However, within the last few weeks we have received from an advertising bureau a "release" in which it is stated that a physician whose name appears as a fellow of the A. M. A. has been honored in numerous ways and with this announcement follows a sort of a biographical sketch of said physician's accomplishments and honors. We are just curious to know if this press agency stuff is published by any reputable medical journal in the United States, as we also are curious to know if the medical advertiser in question finds it profitable to employ a press-agent.

WITHOUT knowing all the facts concerning the illness of Great Britain's king, it is not well for anyone to criticize, and yet we in America feel disposed to suggest that every patient, no matter what his station in life, should have approved attention, and it often seems as though the more prominent the patient the less rest he gets in consequence of a lot of fussy and superfluous attention. In this connection it is apropos to refer to the girl approaching her teens who was sick with an uncomplicated case of measles but the family physician, usually oversolicitous and particularly so when the pay is good, persisted in visiting the patient three times a day and prescribing all sorts of medicine, dietary and hygienic regulations, until finally even the patient rebelled and in a fit of exasperation said, "Doctor, why don't you let me get well?"

WHAT has become of our Indiana laws governing the glaring headlight nuisance? At the present time, few automobilists pay any attention to the rights or privileges of other automobilists and particularly when it comes to dimming headlights. A few weeks ago we witnessed an accident that we thought was retributive justice. An automobile with glaring headlights collided with another automobile whose owner was driving with dim lights and in a very considerate way. In the mix-up the autoist with the glaring headlights landed in the ditch with a badly smashed car and some injury to himself whereas the considerate driver escaped without injury to himself or his automobile. We had no sympathy with the man in the ditch and so informed him. In fact, we were even mean enough to tell him that it was time to cheer in the interest of retributive justice.

It is very evident that a large number of the members of the Indiana State Medical Association desire the old plan of having general and section meetings for the Evansville session. This would mean general meetings on the two forenoons and section meetings on the two afternoons of the session, or perhaps the arrangement may be varied a little so as to put the last general meeting on the last afternoon of the session. Some of the members are in favor of having general meetings only, but that plan would not attract a large attendance in view of the fact that such a large number in the Association are devoting themselves to a specialty and desire to get something more out of the session than can be obtained if there are only one or two papers that appeal to them. The decision of the program committee to have section and general meetings will be approved generally.

It seems to be quite the fad for health officers to close our public schools on account of the influenza epidemic, and yet those same health officers do not seem to consider it necessary to close the moving picture theaters and in particular the

ones with the ten and twenty cent admission fee which appeal to school children and are notoriously lacking in ventilation and ordinary cleanliness. Most of our public school buildings are well ventilated, comfortably warm, and reasonably sanitary. Medical inspection in our public schools also is carried out daily and efficiently. The youngster in the public schools who is sneezing and coughing can be sent home, but you never heard of a moving picture theater proprietor asking anyone to get out! Why not use a little consistency in this question of closing public schools while permitting the more dangerous places of amusement to remain open?

"PAY no money to agents!" is a slogan often seen, and yet every day there are thousands of suckers in this broad land who pay no attention to the warning. Recently a representative for a California concern having offices in Chicago called on numerous Indiana citizens, the exact number of which probably never will be known, and actually collected money in advance in payment for unfermented grape juice to be delivered with the carrying charges paid, and the representative failed to report the sales to his employers. Not a few doctors were victims. It would be well to remember that your credit is established, or should be, and you ought to be insulted to have any agent ask you for money in advance, as any reputable firm should be willing to ship you anything subject to inspection, and payment after goods have been received. If you are asked to give references do so, and do so cheerfully, but insist that if you establish credit you should be treated accordingly.

THE Bulletin of the New York State Board of Health points out that a periodic health examination should be more comprehensive than just a brief examination of heart and lungs by means of the stethoscope. A children's group should be passed for keenness of sight and hearing, the condition of nose and throat (particularly as to diseased or enlarged adenoid and tonsils) teeth defects, sinus disease, blood pressure abnormality, condition of the heart and lungs, state of malnutrition or overwork, the condition of the abdominal organs, posture, flatfeet, blood test, test of reflexes, analysis of urine (particularly for indications of Bright's disease or diabetes). These examinations often will check disease in its incipency, often resulting in the prolongation of life. Physicians ought to preach to their patients and patrons that it is easier to keep well than to get well, that prevention is better than cure, and that a periodic health examination is the best means of checking up on the human machine.

WE still support the American College of Surgeons because we believe in its creed, and because we have wanted to further its high aims and pur-

poses. However, we confess that we are disappointed because the College, through its accredited leaders, does not always live up to its professions, and in fact seems to wink at transgressions and delinquencies, as ample evidence indicates. Not only does this laxity in living up to a high standard apply to some of the individual fellows of the College whose transgressions the powers-that-be overlook, but it applies also to certain hospitals which the College standardizes and places its stamp of approval upon because of not only the character of work done but the ethics personally upheld and prevailing in the institution so recognized. Isn't it about time for those Fellows of the American College of Surgeons who believe in practicing what they preach to get together and insist that the institution which they are supporting with their money and their loyalty shall live up to its professions?

At an early morning meeting of a prominent medical society we noted that one physician had blossomed out in a cutaway coat, white vest, white spats and a plug hat. We were tempted to ask him what patent medicine he represented, but on second thought we felt like offering our sympathy, for the circumstance carried us back to a period, not so many years ago, when young and certainly foolish, we, too, blossomed out with light colored spats, a frock coat, white vest, and a plug hat, and though it was in the evening when such dress might seem appropriate, some anonymous critic, who evidently had been observant, wrote us a note saying, "You pusillanimous, anemic wart, why don't you wear a white man's clothes?" The letter was accompanied by two newspaper advertisements, one concerning "pink pills for pale people", and the other concerning a well-known viburnum compound said to be useful in the treatment of conditions peculiar to women. It goes without saying that we took the hint to avoid conspicuous raiment which might be objectionable to prospective clients of a young physician.

Any member of the Indiana State Medical Association who contemplates attending the A. M. A. session at Portland next July is requested to make his intentions known to Thomas A. Hendricks, executive secretary of the Indiana State Medical Association, 804 Hume-Mansur Building, Indianapolis. In writing Tom, tell him whether you would be interested in joining a special party of Indiana physicians and their wives to occupy one or more Pullman coaches to go through direct from Chicago or Indianapolis and perhaps stopping enroute at some of the scenic points. In all probability there will be one or more official trains, known as A. M. A. specials, starting from Chicago, with itineraries requiring stops at scenic points, and the privilege granted of attaching one or more Pullmans to be occupied exclusively by Indiana physicians and their wives. More about

this matter will be published in an early number of THE JOURNAL, but in the meantime, Tom would like to know how many Indiana physicians intend to go to Portland, whether accompanied by wives or not, and whether they are interested in joining a special Indiana party.

At first it was the stage, now it is the dress-makers that say that the thin and willowy girl is no longer attractive, and therefore the beautiful curves of the plump girl are coming into popularity. Probably this will do much to break up the vicious habit practiced by many young girls in trying to get thin through the adoption of all sorts of unhealthful diets, and the consumption of patent medicines advertised to take off fat. Chronic invalidism of many a young woman can be traced to a faulty diet adopted with the idea of getting thin. Recognizing the dangers of this diet process in order to eliminate flesh, the insurance companies of the country have united in a propaganda which, in effect, says "Eat less and grow thinner, but always take a well-balanced ration". The newspapers say that diet and exercise took off one hundred pounds from the weight of Paul Whiteman, the noted orchestra leader, but one wag says that exercise which worked so favorably with Paul Whiteman was the exercise required in shoving away from the table when still ravenously hungry. Most of us eat too much and exercise too little, and that fact should make an impression upon fat people who sincerely wish to reduce in weight.

Here is a good one. The manufacturer of a nonofficial remedy for rheumatism is cluttering up the physician's mail with pamphlets in which it is claimed that rheumatism always is due to defective metabolism, and that foci of infection are caused by the rheumatism and not the rheumatism caused by the focus of infection. It is strange how often and in what large numbers physicians believe and accept the specious, unwarranted and untrue claims put forth concerning the curative value of proprietary remedies of secret composition. Whenever you question a glib salesman about the virtues of a proprietary remedy he often falls upon the stereotyped expression, "Doctor, what do you care about the formula of this preparation as long as it does the work?" To which we might answer, "Why should we take your word for it, or the word of your employers, when we know from experience that those interested in the sale of a product often misrepresent it?"

All of which leads us to say that the sensible physician will not prescribe any new or nonofficial pharmaceutical unless it has been investigated as to composition and effects by the Council on Pharmacy and Chemistry of the A. M. A. and a favorable report returned. Then only are you safe in employing the preparation.

THE questionnaire is a nuisance, and particularly when it comes from exploiters of one kind or another. Sometimes it comes from a self-advertising physician, and sometimes from a lay person who is working in the interest of some commercial product. Physicians seem to be particularly gullible and "fall" for the questionnaire, and as innocent victims often give opinions which afterward are distorted or misconstrued to aid some commercial enterprise. Thus, "not a cough in a carload" is advertised by the manufacturers of a well-known cigarette, and the advertised health-giving virtues of yeast are samples of the tommyrot that gets started and has been misused by manufacturers who got their inspiration from physicians. This health misinformation, spread out so lavishly and extravagantly through lay publications, in advertising as well as reading matter, is furnished by too many physicians as well as lay persons who are incapable of presenting the matter intelligently and trustworthily. *The Journal of the A. M. A.* strikes a responsive cord when it says, "When physicians make a routine practice of consigning to the wastebasket or the ash can every questionnaire that asks for free advice and comes from an unknown source, the questionnaire nuisance will be a thing of the past".

RECENTLY we heard a very prominent physician tell a patient that he was going to "cure" her. Such a dogmatic statement is uncalled for, and occasionally gets the physician as well as his conferees into bad repute. A promise to cure is a dangerous statement to make because there are so many things which alter results and cannot be foreseen by either physician or patient. Perhaps a physician could not be criticized for saying to a patient, "I think I can cure you", or "I think you will get well following the treatment or operation prescribed", but it would be well to say no more than that, for there is an old saying that "nothing is sure but death and taxes". We heard of a physician who prognosticated death within twenty-four hours and advised that relatives from distant states be called if they wished to see the patient alive. The opinion was relied upon, and the relatives called from a distance at considerable inconvenience and expense, but the patient did not die. The physician lost the friendship and patronage of the whole family. How much better it would have been had the physician simply stated that "while once in a great while there is an exception to any rule, the case under consideration is one that usually ends fatally within from twenty-four to thirty-six hours".

WE are informed that the automobile license law of Indiana compelled automobile drivers to carry the identification card in an aluminum case attached to the footboard of the car or in some conspicuous place. The aluminum cases were furnished by the state at an expense of fifty cents. The

department stores furnish cases for the automobile registration card at ten cents each. Why should automobile drivers be charged fifty cents? It reminds us of an instance where a real estate firm in opening a new addition to one of our Indiana cities decided to put in ornamental street lamps, and the city board of public works insisted that a certain type of lamp post should be used and that the city would furnish it but charge the cost to the real estate firm. When informed that a much better and more ornamental lamp post was designed for the addition, which was to be quite exclusive, the board of public works approved the specifications but insisted that the board could furnish the posts for considerably less money and requested the privilege of filling the order. Unbeknown to the board of public works, the real estate firm got a bid for making the ornamental lamp posts and were not surprised to find that the bid was six dollars less per lamp post than the price quoted by the board of public works, and it was discovered that in each instance the same manufacturer was to receive the order. It makes us smile when some men in public office try to talk about honesty and economy, as it also makes us smile when some of the office holders piously announce that their fingers have never been stained with graft.

A WRITER in the *Glasgow Medical Journal* has very pertinent things to say concerning specializing too early. He says that "one of the besetting sins of the present age is hurry, and if a man specializes too early he is apt to cultivate his own department to the neglect of others. The young man in a hurry who thinks he knows all about his special subject runs a great risk of being a danger both to himself and to the community in which he practices. His enthusiasm, so praiseworthy in itself, stands in need of direction, and can only lead to disaster if permitted to have full scope within the narrow and cramping boundaries of his specialty."

In this connection we desire to call attention to the need of closer contact with men in general medicine by those who are practicing the specialties. In the cities, specialists have medical societies of their own and altogether too often they ignore all other medical societies that discuss problems of general interest. This in itself tends to produce narrowness of view, or a sort of mental astigmatism, so that the specialist sees everything from his viewpoint without sufficient regard for the viewpoint of others. If the specialist has started out as a specialist, and with no other general training than that procured during his college days, there is all the more reason why he should, when out of college, associate himself as much as possible with general practitioners in their meetings and clinics with the one idea in view of broadening the viewpoint. At best he will be narrow just as the general practitioner will be

narrow when it comes to considering the technical questions involving the practicing of a specialty, and they need each other in team work.

IN an article on "Some Have Stopped Drinking", published in the *Saturday Evening Post* of January 28, 1928, Evangeline Booth gives some pertinent facts concerning the success of prohibition in the poorer sections of our large cities. We are prone to say that prohibition is a failure, and yet this noted Salvation Army worker says that any interested person who knows what the condition in the slums of any of our large American cities was before prohibition went into effect and compares those conditions with conditions as they exist today, knows that prohibition is not a failure. There is not the drunkenness, squalor, degradation and indecency now that existed fifteen years ago. This is due to the fact that there is far less drinking than when liquor was to be had at every corner. There is some drinking among the poor, but the volume of drinking is amazingly lessened. There has been such a revolutionary change in the lower strata of American society during the past eight years that the Salvation Army has been required to make almost equally revolutionary changes in its machinery for relieving distress. Evangeline Booth says, "We scrapped our ten and fifteen cent lodgings some time ago because there were no longer men to sleep in them. The men uncharitably called 'bums' are disappearing. We have room and jobs for more worthy men in our industrial homes because they are no longer besieged by clamorous swarms of drunken wrecks. Because we do not have to devote so much costly effort to parents, we have much more time to devote to helpless children. With all emphasis I declare that there is less misery in the homes of the poor in America today because of the disappearance of the saloon. Tens of thousands of homes have been re-established because, through prohibition, some Americans have stopped drinking."

AT a meeting of the Council of the Indiana State Medical Association, held in Indianapolis late in December, the secretary of the State Board of Health made the statement that the state laboratory would be very glad to do away with routine blood examinations and work of like character and devote the time to research work, but that it could not do so as long as the physicians of the state continue to impose upon the state laboratory by sending in specimens that should go to the private laboratories. Admitted that **this is true**, then why shouldn't the medical profession of the state start a movement to cut out routine laboratory work by the State Board of Health when there is absolutely no reason why any physician, no matter where located, should send a specimen to the State Laboratory for examination. There

are enough private laboratories in Indiana to do all the work in the state and do it well, and the private laboratories will do all the charity work that is asked of them if they can satisfy themselves that charity is deserved. Furthermore, the private laboratories will furnish containers or any other help that may be necessary in facilitating the service required. Samples may be sent to the private laboratories just as easily as the state laboratory, and the returns will be just as promptly made and just as trustworthy as the returns from the state laboratory. We have reached that point in the economic status of the individual physician whereby we must take into consideration the growing tendency of states, counties, and municipalities to engage in paternalistic or socialistic medicine, and something must be done and done quickly to stop the abuse of state medical aid. It is wrong in theory, principal and practice, and if it continues it will spell disaster for independent practitioners of medicine. State laboratory abuses are encouraged and broadened as a direct result of the unfair and oftentimes dishonest practices of physicians, and it is time to call a halt. Let every Indiana physician swear off!

EDWIN A. MCALPIN, in the November 1928 *Scribner's* says that "Rich relations are a delusion and a snare." They are considered an asset by those fortunate enough not to have any. Every one who is afflicted with them discovers that they are a liability and a constant source of irritation. This effort to live up to the standards established by rich relations makes the place a difficult one. Albert W. Atwood, in the *Saturday Evening Post* for November 10, 1928, says that it is a question if supposedly favored sons and daughters of the rich are not really handicapped by the lack of poverty. A couple's income need be but a few thousand dollars a year above the subsistence and comfort line before the relaxing and even demoralizing effect makes its appearance in the younger generation. The late President Elliot wrote a graphic piece on the advantages of being the son of a poor family, and made the trite remark that "it may be that the young people of today suffer from too much garage and too little woodshed." No man can be successful or happy without work, regardless of fortune. Money shields the young from much hardship, but in the end it also shields them from strength, development and character. A very large percentage of our most successful and trustworthy physicians have come from poor families. They have known the pinch of poverty and what it costs to acquire an education, and in consequence have taken advantage of and appreciated every opportunity for their advancement. Habits formed during their lean days have followed them in later life and helped them on to well-merited success. On the other hand, a large percentage of the medical men who have been reared in luxury and given every ad-

vantage in educational offerings are not making the most of their opportunities, and not a few of them are signal failures through indolence and lack of initiative. The whole question of riches or poverty depends on a person's idea of right. The most comforting thought of all is that character and intelligence and the joy of life cannot be measured in terms of money, and these are the things that mean the most for human happiness.

THE drugless healers are good advertisers. One of them who claims to be licensed in Kentucky and Indiana distributes a four-page paper called *The Health Messenger*, which presumably carries place on doorsteps, in automobiles and in public places. The published testimonials claim cures of almost every human ailment known in and out of books. Some of the cures are claimed to be miraculous by the patients who have given the testimony. There are no failures. The drugless healer gives as an excuse for advertising that he is following the Master's injunction, "Go ye into all the world and preach the gospel". As to the ethics of the plan pursued, the healer says it is on a par with the right to give notice of the discovery of a spring to those who are dying of thirst in the desert. The amusing feature of the advertising sheet run in newspaper style is a picture of an alleged dinner given to the healer by his former patients, the dinner apparently attended by several hundred people. The advice is given that a sick person should select the person with proper training to take care of him. Evidently some sick people consider that training is equivalent to buncombe and the ability to extract fees from luckless victims.

There have been quacks and medical pretenders of various kinds for hundreds of years. Each and every species of quackery dies after a very short life but another one arises to take its place. The sick man potentially is a dupe, for in his desire to get well quickly he not infrequently shuns trustworthy advice that is too conservative for him and takes up with the extravagant, inconsistent and unscientific advice given by the pretenders. He is much like the investor who shuns the advice of the reliable and experienced banker and becomes an easy victim of the seller of worthless securities that are offered on false promises of big returns from the investment. Unfortunately there are not enough laws to protect people from imposition, and in our effort to protect the sick by proposing regulations requiring education, training and proficiency of those who are to treat the sick, we find that the greatest opposition comes from those who deserve the protection. It is rather a discouraging business, but we hope that before long a controlling percentage of the people will require more ability for treating human ailments than that necessary to massage an inoffensive spinal column.

A FEW weeks ago the osteopaths in Buffalo

asked the management of the City Hospital of Buffalo for an explanation as to why physicians referred to that institution by licensed osteopathic physicians in Buffalo were refused admittance. The hospital management sent a written request to the regular medical profession of the city for an expression of opinion and suggested how the matter should be handled, but the regular medical profession "side-stepped" the issue by replying that the decision rested wholly with the hospital management. An appeal then was made to the American Medical Association, which wired that any hospital that admits to its staff any others than properly trained physicians is unworthy of approval, and that all court decisions uphold boards of trustees in the right to remove from, or keep off, the hospital staff any practitioner whom they believe morally or professionally unqualified to care for sick or injured people. The American College of Surgeons wired that it recognizes only hospitals which meet its standards, and that its standards require that membership upon the staff be restricted to physicians and surgeons who are full graduates of medicine in good standing. The president of the board of managers of the hospital called attention to the fact that the osteopaths of New York State are prohibited by statute from prescribing drugs or practicing surgery, and that all the regulations of the hospital provide that only those physicians may become members of the attending staff of the Buffalo City Hospital, or treat patients in the institution, who are eligible for membership in the American Medical Association. The legal council of the city of Buffalo stated that the hospital was clearly within its rights and legal powers in making and enforcing the rules.

Evidently the management of the Buffalo City Hospital has been a little peeved at the apathy and indifference exhibited by the regular medical profession of the City of Buffalo concerning this question under consideration, and very justly so, for it has put the question to the medical profession as follows: "Do the members of the aforementioned organization (Medical Society of the County of Erie) advise that we continue in force our present rule that only those physicians eligible for membership in the American Medical Association may treat patients in or become members of the attending staff of the Buffalo City Hospital?" To this the president of the local medical society replied, "the society does not wish to become entangled in the present controversy".

To our notion, the regular medical profession of the City of Buffalo deserves severe censure for not giving its moral support to the management of the Buffalo City Hospital in its manifest desire to maintain a high professional standing for the hospital. Unquestionably the regular medical profession is interested and very vitally so in keeping all hospitals worthy of the name free from alliance with any sect or individual physicians

that do not practice medicine and surgery along approved and accepted scientific lines. For instance, can it be said that the regular medical profession wishes to approve treatment of fevers, of blood dyscrasias, or infectious diseases by osteopathic methods, and does any hospital through its board of managers wish to place its hospital in disrepute through such unscientific treatment of the affections mentioned as that presumably followed by osteopaths? Certainly not! Then why hesitate about expressing an opinion or taking definite action concerning the matter?

DEATHS

FLEETWOOD H. SALE, M.D., of Dillsboro, died December 4th, aged sixty years. He graduated from the Medical College of Ohio, Cincinnati, in 1889.

HERBERT L. BAKER, M.D., of Lebanon, died December 21, aged forty-seven years, following a two weeks' illness of influenza. He graduated from the Homeopathic Medical College of Missouri, in 1904.

ELI L. YOUNGBLOOD, M.D., of Boonville, died December 14, aged sixty-eight years. Doctor Youngblood graduated from the Kentucky School of Medicine, Louisville, in 1893, and from the Chicago Homeopathic College in 1894.

KENT KANE WHEELOCK, M.D., eye, ear, nose and throat specialist of Fort Wayne, died suddenly of heart-disease, December 28. Dr. Wheelock was seventy-one years of age. He had been in ill health for several months but continued to take care of his practice until a few days before his death. Dr. Wheelock was professor of ophthalmology at the old Fort Wayne College of Medicine. He served from 1882 to 1884 as coroner of Allen County. He graduated from the Bellevue Hospital Medical College, New York, in 1880, and was a member of the Fort Wayne Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION*. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

DR. B. WALLACE, of Franklin, celebrated his 92nd birthday, December 20th.

FRED McK. RUBY, M.D., formerly of Union City, Indiana, is now with the Morsman Clinic at Hibbing, Minnesota.

DR. W. E. JENKINSON, formerly of Spiceland,

has moved to Mt. Vernon, Indiana, where he will continue the practice of medicine.

DR. JOHN H. WILLIAMS, formerly of Cowan, Indiana, has purchased a home in Muncie where he expects to continue the practice of medicine.

THE Thirteenth annual meeting of the Indiana Society for Mental Hygiene was held December 10th, with headquarters at the Claypool Hotel, Indianapolis.

DR. C. J. BROEMAN, of Cincinnati, presented a paper on "Radium in the Treatment of Malignancy" before the Tri-County Medical Society at North Vernon, December 19, 1928.

DR. HAROLD S. HATCH, superintendent of the Marion County Tuberculosis Hospital, Sunnyside, resigned his position with that institution on January 1, to enter the private practice of medicine.

DR. AND MRS. FRANK E. WIEDEMANN, of Terre Haute, left after the holidays for an extensive trip through the South Sea Islands, New Zealand and Australia. They expect to return some time in April.

THE Jay County Medical Society officers for 1929 are as follows: George V. Cring, M.D., Portland, president; J. E. Nixon, M.D., Portland, vice-president; B. M. Taylor, M.D., Portland, secretary.

DR. O. B. NESBIT, of Gary, was elected president of the Lake County Medical Society for 1929. Other officers are: Dr. J. A. Craig, Gary, president-elect; Dr. E. M. Shanklin, Hammond, secretary-treasurer.

At a meeting of the Decatur County Medical Society held in December, the following officers were elected: Dr. B. S. White, president; Dr. Charles Wood, vice-president; Dr. Charles Overpeck, secretary-treasurer.

OFFICERS for the Jasper-Newton County Medical Society for 1929 have been elected as follows: president, Dr. W. C. Mathews, Kentland; vice-president, Dr. G. D. Larrison, Morocco; secretary, Dr. H. E. English, Rensselaer.

DR. H. M. RHORER, of Kokomo, was elected president of the Howard County Medical Society at the meeting held December 7. Dr. W. R. Morrison, of Kokomo, was elected vice-president; and Dr. E. R. Clarke, Kokomo, secretary-treasurer.

DR. NETTIE POWELL has been elected president of the Grant County Medical Society for 1929, with Dr. Eleanor McIlwain as vice-president and Dr. Francis Johnson, secretary. This is the first

time in history that women have held all major offices of the society.

DR. H. C. RUDDICK, of Evansville, was made president of the Vanderburgh County Medical Society at the meeting held December 11th. Dr. Bernard Ravdin, Evansville, was elected vice-president and Dr. Keith T. Meyer, Evansville, secretary-treasurer.

ALL officers of the Hamilton County Medical Society for 1928 were re-elected for 1929. They are as follows: Dr. James Griffith, of Sheridan, president; Dr. J. E. Hanna, of Noblesville, vice-president; and Dr. Ray W. Shanks, Noblesville, secretary-treasurer.

AT the meeting of the Daviess-Martin County Medical Society held December 18th, Dr. W. O. McKittrick, of Washington, was elected president; Dr. Jerome H. DeMotte, of Odon, vice-president, and Dr. H. C. Wadsworth, of Washington, secretary-treasurer.

AT the annual meeting of the Noble County Medical Society, held December 11, at Ligonier, Dr. C. B. Goodwin, of Kendallville, was elected president; Dr. J. H. Ravenscroft, of Albion, vice-president and Dr. W. F. Carver, Albion, re-elected secretary-treasurer.

OFFICERS for the Wabash County Medical Society for 1929 were elected at a meeting held at Wabash, December sixth. Dr. E. J. Cripe, of North Manchester, was elected president; Dr. James Walker, of Lafontaine, vice-president; and Dr. O. G. Brubaker, secretary-treasurer.

THE next meeting of the American Association for the study of goiter will be held in Dayton, Ohio, March 25, 26 and 27, 1929. Headquarters will be at the Miami Hotel, and the meeting will be in charge of the Miami County Medical Society of which Dr. William A. Ewing is president.

A NATION wide educational campaign for the prevention of blindness and the conservation of vision among the industrial workers of America and among their families will be launched immediately as a joint effort of the American Federation of Labor and the National Society for the Prevention of Blindness.

ON December 5, 1928, the officials and members of the medical pharmaceutical and allied professions of Lafayette, Indiana, were addressed by Dr. Charles E. Vanderkleed, chairman of the Contact Committee of the American Pharmaceutical Manufacturers' Association. His subject was "Improvement in the Quality of American Drug Products due to Co-operation in the Industry."

DR. ALBERT E. BULSON, of Fort Wayne, was elected president of the Indiana Academy of Ophthalmology and Otolaryngology at the closing meeting of the twelfth annual session held in Indianapolis December 12 and 13. Dr. Edgar C. Davis, Muncie, was made first vice-president; Dr. Ralph S. Chappell, Indianapolis, second vice-president; Dr. Robert J. Masters, Indianapolis, secretary-treasurer.

THE Welborn Hospital Clinic presented its December clinic program, December 19th. The following papers were presented: "Hospital Standardization as Promulgated by the American College of Surgeons and the American Medical Association," by James Y. Welborn; "Hypertension," by Shelby W. Wishart; symposium on "Sterility in the Male and Female," by Dr. John W. Visser and Dr. J. F. Wynn; "Mastoid Infection," by Dr. A. F. Clements.

DR. JOHN F. BARNHILL will continue his post-graduate work in surgery of the head and neck during the coming winter, the first class to begin on January 8, 1929. The work will be given over a period of four weeks, three nights per week (Monday, Wednesday and Friday) from seven to ten o'clock, and will be given in the anatomical laboratory of the Indiana University Medical Building. Anyone interested may obtain detailed information by writing to the Dean's office at the medical school, 1040 West Michigan Street, Indianapolis.

THE U. S. Civil Service Commission announces open competitive examinations for Toxicologist, Associate Toxicologist and Assistant Toxicologist, applications for which positions must be on file with the Civil Service Commission at Washington, D. C. not later than January 23, 1929. Examinations are to fill vacancies in the Bureau of Mines, Department of Commerce, for duty in Washington, D. C., or in the field; in the Chemical Warfare Service, War Department, for duty at Edgewood Arsenal, Edgewood, Maryland; and vacancies occurring in positions requiring similar qualifications.

THE United States Public Health Service, in connection with its inspection of biologic products as required by law, performs a service of great value to the general public. Before a biologic product, such as a serum, toxin, vaccine or anti-toxin may be sold in the United States in interstate or international commerce a license must be obtained from the Public Health Service. The granting of this license means that inspection of the establishment concerned and laboratory examinations of samples of its products are made regularly to insure observance of safe methods of manufacture, to ascertain freedom from contam-

ination and to determine the purity or safety, or both, of the various products.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Arlington Chemical Co.:

Western Water Hemp Pollen Extract-Arlco.

Spiny Amaranth Pollen Extract-Arlco.

E. Bilhuber, Inc.:

Metrazol.

Metrazol Ampoules, 1 cc.

Metrazol Tablets.

The Gilliland Laboratories, Inc.:

Rabies Vaccine-Gilliland (Semple Method).

H. A. Metz Laboratories, Inc.

Salyrgan.

Ampules Salyrgan Solution, 1 cc.

Ampules Salyrgan Solution, 2 cc.

E. R. Squibb & Sons:

Antipneumococcic Serum, Type 1, 50 cc. gravity container.

Antistreptococcic Serum-Squibb, 50 cc. gravity container.

Squibb's Mint-Flavored Cod Liver Oil.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION THE COUNCIL

Upon the call of E. E. Evans, of Gary, temporary chairman, the regular mid-winter meeting of the Council of the Indiana State Medical Association convened at 10:30 a. m. Thursday, December 20, at the Indianapolis Athletic Club, Indianapolis. The roll call showed the following present: George R. Daniels, president 1928; Charles E. Gillespie, president 1929; A. C. McDonald, president-elect 1930; William A. Doeppers, treasurer, Albert E. Bulson, editor of *THE JOURNAL*.

Members of the Council

- First District—John H. Hare, Evansville.
- Second District—G. D. Scott, Sullivan.
- Third District—Walter Leach, New Albany.
- Fourth District—H. P. Graessle, Seymour.
- Fifth District—Not represented.
- Sixth District—Not represented.
- Seventh District—E. E. Padgett, Indianapolis.
- Eighth District—M. A. Austin, Anderson.
- Ninth District—F. S. Crockett, Lafayette.
- Tenth District—E. E. Evans, Gary.
- Eleventh District—Not represented.
- Twelfth District—Not represented.
- Thirteenth District—Not represented.

THOMAS A. HENDRICKS,

Executive Secretary.

The reading of the minutes of the Council meetings during the annual convention at Gary last September was dispensed with, as these were printed in the October number of *THE JOURNAL* and approved.

Reports of Councilors by Districts.

Each councilor present gave a short informal report of the condition of medical organization in his district. These reports showed that the general condition in each district was good. High points of these various reports follow:

FIRST DISTRICT.—Dr. Hare, who has just succeeded Dr. Davidson as councilor for the first district, reported that every effort will be made by the members of the Vanderburgh County Medical Society and the profession

in the first district to hold a successful convention at Evansville next September.

SECOND DISTRICT.—A new sanitarium for the treatment of cancer has been established in Knox County, in the second district, by a man named Ennis. According to the statement of Dr. Scott, councilor, Ennis has two associates, Sherwood and McKim. This group is not in good standing in local medical circles. (The State Board of Medical Registration and Examination has had the question of the legality of Ennis' license under consideration for some time. Dr. Sherwood was licensed a number of years ago by the Board and, according to the clerk of the State Board of Medical Registration and Examination, McKim, who is thought to have a family connection with Ennis, has never been licensed. This matter has caused the State Board of Medical Registration and Examination a great deal of trouble for some time.)

THIRD DISTRICT.—Dr. Leach reported a fine district spirit and a good annual district meeting. He said that all the counties in his district were well organized except Crawford. He asked the advice of the Council in regard to certain changes in the by-laws of local county medical societies. (The secretary was instructed to send Dr. Leach a copy of the suggested constitution and by-laws for county societies which is issued by the American Medical Association.)

FOURTH DISTRICT.—Dr. Graessle reported good results from multiple county organizations in his district and gave some suggestions upon post-graduates study programs.

SEVENTH DISTRICT.—Dr. Padgett reported every county society in his district in good shape with the exception of Johnson which does not seem able to promote an effective medical organization.

Question concerning the ethical feature of advertising done by a certain Martinsville sanitarium came before the Council. Dr. Bulson made a motion that the Council of the Indiana State Medical Association go on record as opposing the advertising of any medical institution or hospital which misrepresents in any way its equipment and its facilities for service. Motion seconded and adopted. Upon the suggestion of Dr. Doeppers, Dr. Bulson moved that this entire matter be referred to the Hospital Committee of the State Association with the request that it act. Seconded and carried.

EIGHTH DISTRICT.—Dr. Austin, councilor of the eighth district, reported much activity in the various county societies of his district. He said that the county societies were all in good shape. He offered objection to certain literature that is being printed in behalf of the Riley Hospital and used as "propaganda" in the various counties of his district. According to Dr. Austin, form letters are distributed to the laity in each county, then nurses from the Riley Hospital follow in the county and carry on their work. As a result Dr. Austin believes that much work is being sent to the Riley Hospital in Indianapolis that could just as well be done in the various local communities. Dr. Austin suggested that the Council go on record that such nurses be compelled to get in touch with the county medical society in any county where such action is contemplated. This suggestion was put to the Council in the form of a motion by Dr. Crockett, seconded by Dr. Hare, and carried. The matter also was taken up with Burton D. Myers, of the Indiana University School of Medicine, who was to investigate the source of these letters and make a report to the executive office concerning the matter. Dr. Austin stated that he had written a letter to the Riley Hospital several weeks before the Council meeting, complaining of this activity, and up to the time the Council met had received no answer.

NINTH DISTRICT.—Dr. Crockett reported the district generally in good shape.

TENTH DISTRICT.—Dr. Evans said that the tenth district was in splendid shape. The Jasper-Newton County Society probably has the very best proportionate regular attendance of any society in the state according to Dr.

Evans. The physicians of these counties meet at the various physicians' houses for dinner. This makes a fine general feeling. In Lake county only five men in the county do not belong to the society who are eligible out of a total of two hundred two physicians. Dr. Evans spoke of the fine cooperation of the Gary Chamber of Commerce in aiding the battle against medical quacks.

Reports of Officers

Dr. Bulson reported that it had always been the policy of THE JOURNAL, and it would continue to be the policy of THE JOURNAL, to refuse all questionable advertising. The American Medical Association repeatedly has complimented THE JOURNAL upon its standing in this matter. Dr. Bulson said that he invited constructive criticism at all times in regard to THE JOURNAL. He said that he desired a greater number of personal items, news notes and comments.

Dr. McDonald, president-elect 1930, suggested that short practical articles that would be of help in everyday practice would be a most valuable asset to THE JOURNAL. He spoke of the fact that almost every physician had certain methods in his work which would be valuable information to the profession as a whole. Dr. Bulson expressed himself as believing that this was a good suggestion and hoped that in the future he would receive a number of these short, practical articles for publication.

TREASURER'S REPORT

APPLICATION OF FUNDS FOR THE TWELVE MONTHS PERIOD ENDING DECEMBER 31, 1928.

INCOME	
2,738 Members Dues @ \$7.00.....	\$19,166.00
Income from Exhibits.....	2,600.00
Interest on Deposits.....	1,468.10
Interest on Liberty Bonds.....	212.50
Total income for period.....	\$23,446.60

EXPENDITURES	
Executive Secretary's Office.....	\$10,798.68
Medical Defense.....	1,650.00
Publicity Committee.....	512.99
Public Policy.....	309.52
Journal.....	5,468.00
Other Committees.....	153.42
Council.....	227.20
Officers.....	217.50
Annual Session.....	2,242.61
Attorney.....	300.00
Better Business Bureau.....	200.00
Total expenditures.....	\$22,079.92
Net income for 1928.....	\$ 1,366.68
Surplus at December 31, 1927.....	\$27,015.26
Adjustment of balance of the contingent fund through surplus.....	\$ 2,200.00
Surplus at January 1, 1928.....	\$24,815.26
Surplus at December 31, 1928.....	\$26,181.94

ANALYSIS OF SURPLUS ACCOUNT AT DECEMBER 31, 1928

Certificate of Deposit with Meyer-Kiser Bank.....	\$15,000.00
Certificate of Deposit with Meyer-Kiser Bank.....	5,000.00
Checking Account Balance in the Meyer-Kiser Bank.....	981.94
Liberty Bonds Held in Safety Deposit Box.....	5,000.00
Petty Cash Account in Bankers Trust Company.....	200.00
Total.....	\$26,181.94

Comparative statement of income and expenses for the years of 1927 and 1928:

INCOME			
	1927	1928	Increase
Dues.....	\$18,837.00	\$19,166.00	\$ 329.00
Exhibits.....	3,437.50	2,600.00	*837.50
Interest on Deposits.....	1,080.59	1,468.10	387.51
Interest on Liberty Bonds.....	212.50	212.50
	\$23,567.59	\$23,446.60	*\$ 120.99
EXPENDITURES			
Executive Secretary's Office.....	\$ 9,490.49	\$10,798.68	\$1,308.19
Medical Defense.....	475.00	1,650.00	1,175.00
Publicity Committee.....	400.09	512.99	112.90
Journal.....	5,382.00	5,468.00	86.00
Public Policy.....	2,458.25	309.52	*2,148.73
Other Committees.....	577.08	153.42	*423.65
Council.....	197.41	227.20	29.79
Officers.....	186.50	217.50	31.00
Annual Session.....	2,268.69	2,242.61	*26.08

Attorney.....	303.00	300.00	*3.00
Better Business Bureau.....	200.00	200.00
	\$21,986.81	\$22,079.92	*\$ 93.11

Net income.....\$1,580.78 \$ 1,366.68 *\$ 214.10

Upon the motion of Dr. Hare, seconded by Dr. Padgett, the treasurer's report was accepted as read.

Short reports were made by Dr. McDonald, president-elect, Dr. Gillespie, incoming president, and Dr. Daniels, retiring president.

Echoes and Reflections of 1928 Annual Session at Gary

There was much favorable comment upon the Gary session, the general reaction being that it was a fine session in every respect.

The Council voted to leave the selection of an amplifier up to the Program Committee.

The Council heard recommendations of the Surgical Section and the Indiana Academy of Ophthalmology and Otolaryngology that the Program Committee return to the section form of meetings for the 1929 program. Upon the motion of Dr. Crockett, seconded by Dr. Padgett, the Council recommended that the Program Committee arrange for section meetings for 1929. Motion carried.

Discussion upon the scientific program brought out the conclusion that no paper should be more than twenty minutes in length, that the length of time taken up by each discussant should be cut down, and that it should be the duty of the chairman of each of the sections to see that speakers limit themselves to the time allotted.

Financial report of the income from the technical exhibit and the cost of the 1928 annual session was made.

Suggestions and Proposals for the 1929 Session at Evansville

Each councilor was supplied with a special preliminary report prepared by Dr. G. C. Johnson, president of the Vanderburgh County Medical Society for 1928, giving a preliminary survey of the convention arrangements for 1929. Dr. Hare, councilor for the first district, presented the report which follows:

Preliminary Report Upon Arrangements for Evansville Session—1929

To the Council of the Indiana State Medical Association: Gentlemen:

I present herewith the preliminary report of arrangements for the Evansville session of the State Association, September 25, 26, 27, 1929.

It is obvious that we cannot at this time give more than a resumé of our activities, but we wish to advise you concerning some of the things we are doing and some that we expect to do.

CONVENTION HEADQUARTERS:

Headquarters will be established in the Hotel McCurdy, Evansville.

HOTELS AVAILABLE FOR CONVENTION GUESTS:

Hotel McCurdy, Vendome Hotel, Hotel Sonntag and New Hotel Lincoln.

a. Rates per day for each hotel:

Hotel McCurdy: \$3.00 single—\$5.00 double; \$3.50 single—\$5.50 double; \$4.00 single—\$6.00 double; \$4.50 single—\$7.00 double; \$5.00 single—\$8.00 double; \$6.00 single—\$10.00 double. Rooms with twin beds \$6.00 and \$10.00 per day double.

Club breakfast, 75 cents; Merchants' lunch, 85 cents; Table D'Hote dinner, \$1.50. Dining room open from 6 a. m. until 9 p. m. with a la carte service during that time.

Vendome Hotel: Single room without bath—\$1.50 to \$2.00; single room with bath—\$2.00 to \$3.50; double room without bath, \$3.00; double room with bath—\$4.00 to \$5.00.

In the Coffee Shop. Club breakfast, 35 cents to 65 cents; noonday lunch, 45 cents; evening dinner, 75 cents.

In the Cafe—Noonday lunch, 65 cents; evening dinner, \$1.00; a la carte service also.

*Decrease.

Hotel Sonntag: Single room with bath—\$2.00 to \$3.50. Where there are two in a room, we add only a very reasonable charge.

New Hotel Lincoln: Single room without bath—\$1.50 to \$1.75; single room with bath—\$2.00; double room without bath—\$2.50 to \$2.75; double room with bath—\$3.50.

b. Rooms with and without baths:

Hotel McCurdy: 300 rooms, all with baths and circulating ice water. I. S. M. A. could have about 150 to 175 rooms.

Vendome Hotel: 300 rooms; 260 have baths and 40 without. Could take care of at least 250.

Hotel Sonntag: 110 rooms with bath but could probably accommodate only about 75 to 100 people.

New Hotel Lincoln: 40 rooms with bath and 60 without bath but could probably accommodate only about 35 to 40 people.

ROUTES TO EVANSVILLE:

a. Railroads:

C. & E. I. from Chicago connects with cross state routes at Danville, Terre Haute and Vincennes. Southern to French Lick and West Baden. Bus routes over all state highways.

b. Highways by automobiles:

Indianapolis to Evansville:

Follow U. S. 40 from Indianapolis to Terre Haute, Ind., thence on U. S. 41 to Evansville. Concrete. Distance 196 miles.

South Bend to Evansville:

Follow U. S. 31 from South Bend to Indianapolis, thence on U. S. 40 to Terre Haute, and U. S. 41 to Evansville. Concrete. 342 miles.

Fort Wayne to Evansville:

Follow U. S. 24 to Huntington, state road 9 to Anderson, state road 67 to Indianapolis, U. S. 40 to Terre Haute, and U. S. 41 to Evansville. Concrete. 328 miles.

Gary to Evansville:

From Gary follow state road 55 to the intersection of federal road 30, (Harrillsville), turn west on No. 30 to the intersection of U. S. 41 (Schererville) then south on U. S. 41 to Attica, Terre Haute, and Evansville. All concrete. Distance 319 miles.

French Lick to Evansville:

Follow state road 56 from French Lick to Hayesville, then No. 45 to Jasper, Huntingburg and Gentryville, to the intersection of road No. 62, then west on No. 62 through Boonville to Evansville. Concrete and gravel road. Distance 89 miles.

ACCOMMODATIONS FOR SCIENTIFIC SESSION:

- Location of rooms in relation to commercial exhibit: Commercial exhibits on mezzanine floor, ample space.
- Seating capacity of various rooms: Small rooms seating about fifty, adjacent to mezzanine floor.
- Seating capacity of general meeting hall: General meeting hall, eighth floor, seats five hundred.
- Speaking arrangements to eliminate outside noises: No trouble from outside noises, etc. No amplifiers necessary.

ACCOMMODATIONS FOR CLINICS IF DESIRED BY PROGRAM COMMITTEE.

Good accommodations for clinics if desired.

ACCOMMODATIONS FOR PUBLIC LAY MEETING:

Capacity: General meeting hall or adjacent church can be used.

BANQUET:

- Seating capacity: McCurdy balroom will accommodate 350 for banquet.
- Price—\$2.50.

EXHIBIT:

- Space available at hotel headquarters.
- Mezzanine floor. Does not know whether or not there is anyone at Evansville who can construct booths and take care of exhibits.

- Hotel will supply sample tables and chairs.
- Have asked Hotel for drawing and dimensions of mezzanine floor.
- Electric current available: Direct electric current, 110 volts.
- Registration desk can be placed on mezzanine floor so one would have to pass through exhibits to get to it.

LANTERNS:

Sufficient lanterns are available.

REGISTRATION:

- Location of registration desk in exhibit hall. Chamber of Commerce will supply everything necessary.

INFORMATION DESK:

Chamber of Commerce will supply everything necessary.

TYPES OF MEETINGS WANTED BY LOCAL SOCIETY:

The general sentiment of the local society favors general meetings. This will be presented again at our meeting December 11, which is our annual election and usually well attended.

ENTERTAINMENT:

Not settled yet. There will probably be a river trip and we are looking up boats. We shall probably organize a Women's Auxiliary.

GOLF TOURNAMENT:

Not settled yet. Tournament will probably be played at Country Club, eighteen holes. We also have eighteen-hole municipal course.

NAMES OF COMMITTEE MEMBERS:

Only one committee has been named and this only temporary as I am leaving this work for the new president who will be elected December 11.

In addition to the general local arrangements committee, the following local committees are customary: Finance Committee.

Lantern Committee.

Hotel Committee.

Banquet or Public Meeting Committee.

Publicity Committee.

Golf Committee.

Registration Committee.

Fraternity and Class "Get-to-gether" Committees.

Ladies Entertainment—May be in charge of Women's Auxiliary if one exists.

Women physicians usually have one meeting of their own.

Reception Committee.

General Committee.

G. C. JOHNSON, M.D.,

President, Vanderburgh County Medical Society for 1928.

In regard to the type of program, whether outside or local talent should be used, the Council went on record as favoring a mixed program made up of "stuff" that can be of practical use to the ordinary practitioner and containing suggestions and information that will be of use to the general physician. The Council recommended that each section have one speaker from outside of Indiana.

Upon the motion of Dr. Padgett, seconded by Dr. McDonald, the Council went on record as favoring a scientific exhibit under arrangements similar to those of last year. The Council made no special appropriation for this exhibit.

Membership Report by Districts

INDIANA STATE MEDICAL ASSOCIATION

December 31, 1928.

Dec. 31 1928 Dec. 31 1927 Loss Delin- Mem- mo- ceas- state-
1928 1927 Gain quent bers val ed ments

First Dis. County Soc.								
Posey	12	11	1	1	1			
Vanderburgh	95	96	-1	2	2	1	3	1
Warrick	12	4	8		4			4
Spencer	11	10	1			1	3	1
Perry	11	11					1	
Gibson	21	23	-2	1	1	1	1	1
Pike	7	7					1	
Total	169	162	7	4	8	3	9	7

Second District:									
Knox	32	32	1					1	
Daviess-Martin	26	27	-1	2	2	2	2	1	
Sullivan	21	24	-3			2	3		
Greene	15	15		4	2				
Owen	8	6	2		1		2	1	
Monroe	25	24	1		1	4		1	
Total	127	128	-1	7	6	8	7	4	
Third District:									
Lawrence	23	25	-2	1			2	1	
Orange	16	18	-2	3					
Crawford	5	4	1		1				
Washington	9	9							
Scott	3	3							
Clark	17	18	-1			2	2	1	
Floyd	29	30	-1	2		1			
Harrison	6	8	-2						
Dubois	14	15	-1	1			1		
Total	122	130	-8	8	1	3	5	2	
Fourth District:									
Brown									
Bartholomew	23	23					2		
Decatur	19	20	-1				2		
Jackson	19	18	1		3	1	1		
Jennings	10	10				1			
Ripley	11	11		2	1		1	1	
Jefferson	20	19	1		1	1			
Switzerland	7	6	1						
Dearborn-Ohio	18	20	-2	1	2		3	1	
Total	127	127	0	3	7	3	9	2	
Fifth District:									
Parke-Vermilion	12	16	-4	5				1	
Putnam	16	16			1		1		
Vigo	117	113	4	5	6	2	2	1	
Clay	15	19	-4	2			3		
Total	160	164	-4	12	7	2	6	1	
Sixth District:									
Hancock	16	15	1				1	2	
Henry	30	27	3	1	4	2	1		
Wayne-Union	53	52	1	1	2	2	3	1	
Fayette	12	14	-2	1			1		
Rush	22	22			1	1		1	
Shelby	20	22	-2	6			1	2	
Franklin	6	6			1				
Total	159	158	1	9	8	5	7	6	
Seventh District:									
Hendricks	16	16							
Marion	466	439	27	22	37	23	20	5	
Morgan	21	21		3	1		2	1	
Johnson	12	10	2		2				
Total	515	486	29	25	40	23	22	6	
Eighth District:									
Madison	59	62	-3	6	2	3	3	4	
Delaware-Blkfrd.	69	71	-2	4	3	3	3	2	
Jay	18	19	-1	1	1		3		
Randolph	24	24			1		1		
Total	170	176	-6	11	7	6	10	6	
Ninth District:									
Benton	12	12							
Fountain-Warren	22	21	1		2	1			
Tippecanoe	68	69	-1		1	1	1	3	
Montgomery	27	29	-2	4	1		1		
Clinton	21	26	-5	5			5	1	
Tipton	10	12	-2	1			1		
Boone	9	12	-3	5		1	1		
Hamilton	22	21	1		2	1	2	2	
White	10	10		2	1	3	1		
Total	201	212	-11	17	7	7	12	6	
Tenth District:									
Lake	197	162	35	5	30	4	2	8	
Porter	21	22	-1	2					
Jasper-Newton	18	18		3				1	
Total	236	202	34	10	30	4	2	9	
Eleventh District:									
Carroll	21	18	3		1		2		
Cass	38	36	2	4	2		3	2	
Miami	22	22		2	2				
Wabash	29	28	1	1	3	1	2		
Huntington	24	24			1		2	1	
Howard	39	39		1			4		
Grant	40	42	-2	4	2	2	2	2	
Total	213	209	4	12	11	3	13	7	
Twelfth District:									
LaGrange	13	10	3		1		2		
Steuben	12	14	-2	2			1		
Noble	23	23			4		1		
DeKalb	21	21		2	1	1			
Whitley	13	11	2		1		2	1	
Allen	130	131	-1	4	6	9	5	1	

Wells	19	17	2		1	2	2	1	
Adams	19	20	-1		1			1	
Total	250	247	3	9	14	12	12	5	
Thirteenth District:									
LaPorte	43	45	-2	3	1	1		1	
St. Joseph	127	131	-4		1	2		5	3
Elkhart	69	67	2	1	5		2		
Starke									
Pulaski	8	6	2		1			1	
Fulton	19	19		1	2		2	1	
Marshall									
Kosciusko	20	23	-3					3	
Total	286	291	-5	5	10	3	12	6	

SUMMARY BY DISTRICTS									
First District	169	162	7	4	8	3	9	7	
Second District	127	128	-1	7	6	8	7	4	
Third District	122	130	-8	8	1	3	5	2	
Fourth District	127	127	0	3	7	3	9	2	
Fifth District	160	164	-4	12	7	2	6	1	
Sixth District	159	158	1	9	8	5	7	6	
Seventh District	515	486	29	25	40	23	22	6	
Eighth District	170	176	-6	11	7	6	10	6	
Ninth District	201	212	-11	17	7	7	12	6	
Tenth District	236	202	34	10	30	4	2	9	
Eleventh District	213	209	4	12	11	3	13	7	
Twelfth District	250	247	3	9	14	12	12	5	
Thirteenth District	286	291	-5	5	10	3	12	6	
Total	2735	2692	43	132	156	82	126	67	

COMPARATIVE STATEMENT OF MEMBERSHIP DUES FOR YEARS 1927 AND 1928									
		1927		1928	Inc.	or	Dec.		
Adams	20	\$ 140.00	19	\$ 133.00	1	\$ 7.00			
Allen	131	917.00	130	910.00	1	7.00			
Bartholomew	23	161.00	23	161.00					
Benton	12	84.00	12	84.00					
Boone	12	84.00	9	63.00	3		21.00		
Carroll	18	126.00	21	147.00	3		21.00		
Cass	36	252.00	38	266.00	2		14.00		
Clark	18	126.00	17	119.00	1		7.00		
Clay	19	133.00	15	105.00	4		28.00		
Crawford	4	28.00	5	35.00	1		7.00		
Clinton	26	182.00	21	147.00	5		35.00		
Daviess-Martin	27	189.00	26	182.00	1		7.00		
Dearborn-Ohio	20	140.00	18	126.00	2		14.00		
Decatur	20	140.00	19	133.00	1		7.00		
DeKalb	21	147.00	21	147.00					
Delaware-Blkfrd	71	497.00	69	483.00	2		14.00		
Dubois	15	105.00	14	98.00	1		7.00		
Elkhart	67	469.00	69	483.00	2		14.00		
Fayette	14	98.00	12	84.00	2		14.00		
Floyd	30	210.00	29	203.00	1		7.00		
Fount'n-Warren	21	147.00	22	154.00	1		7.00		
Franklin	6	42.00	6	42.00					
Fulton	19	133.00	19	133.00					
Gibson	23	161.00	21	147.00	2		14.00		
Grant	42	294.00	40	280.00	2		14.00		
Greene	15	105.00	15	105.00					
Hamilton	21	147.00	22	154.00	1		7.00		
Hancock	14	98.00	16	112.00	2		14.00		
Harrison	8	56.00	6	42.00	2		14.00		
Hendricks	16	112.00	16	112.00					
Henry	27	189.00	30	210.00	3		21.00		
Howard	39	273.00	39	273.00					
Huntington	24	168.00	24	168.00					
Jackson	18	126.00	19	133.00	1		7.00		
Jasper	18	126.00	18	126.00					
Jay	19	133.00	18	126.00	1		7.00		
Jefferson	19	133.00	20	140.00	1		7.00		
Jennings	10	70.00	10	70.00					
Johnson	10	70.00	12	84.00	2		14.00		
Knox	32	224.00	32	224.00					
Kosciusko	23	161.00	20	140.00	3		21.00		
LaGrange	10	70.00	13	91.00	3		21.00		
Lake	162	1,134.00	200	1,400.00	38		266.00		
LaPorte	45	315.00	43	301.00	2		14.00		
Lawrence	25	175.00	23	161.00	2		14.00		
Madison	62	434.00	59	413.00	3		21.00		
Marion	439	3,073.00	466	3,262.00	27		189.00		
Miami	22	154.00	22	154.00					
Monroe	25	175.00	25	175.00					
Montgomery	29	203.00	27	189.00	2		14.00		
Morgan	21	147.00	21	147.00					
Noble	23	161.00	23	161.00					
Orange	18	126.00	16	112.00	2		14.00		
Owen	6	42.00	8	56.00	2		14.00		
Parke-Vermilion	16	112.00	12	84.00	4		28.00		
Perry	11	77.00	11	77.00					
Pike	7	49.00	7	49.00					
Porter	22	154.00	21	147.00	1		7.00		
Posey	11	77.00	12	84.00	1		7.00		
Pulaski	6	42.00	8	56.00	2		14.00		
Putnam	16	112.00	16	112.00					
Randolph	24	168.00	24	168.00					
Ripley	11	77.00	11	77.00					
Rush	22	154.00	22	154.00					
Scott	3	21.00	3	21.00					
Shelby	22	154.00	20	140.00	2		14.00		
Spencer	10	70.00	11	77.00	1		7.00		

Steuben	14	98.00	12	84.00	2	14.00
St. Joseph	131	917.00	127	889.00	4	28.00
Sullivan	24	168.00	21	147.00	3	21.00
Switzerland	6	42.00	7	49.00	1	7.00
Tippecanoe	69	483.00	68	476.00	1	7.00
Tipton	12	84.00	10	70.00	2	14.00
Vanderburgh	96	672.00	95	665.00	1	7.00
Vigo	113	791.00	117	819.00	4	28.00
Wabash	28	196.00	28	196.00		
Warrick	3	21.00	13	91.00	10	70.00
Washington	9	63.00	9	63.00		
Wayne Union	52	364.00	53	371.00	1	7.00
Wells	17	119.00	19	133.00	2	14.00
White	10	70.00	10	70.00		
Whitley	11	77.00	13	91.00	2	14.00
	2691	\$18,837.00	2738	\$19,166.00	47	\$329.00
	915	6,405.00	900	6,300.00*	15	*105.00
	1350	9,450.00	1396	9,772.00	46	322.00
	426	2,982.00	442	3,094.00	16	112.00
	2691	\$18,837.00	2738	\$19,166.00	47	\$329.00

The above report shows three more memberships for 1928 than is shown on the membership report by districts. These three are 1927 memberships which were received too late to be included in the 1927 report of dues.

Report of Special Committee of Council

In accordance with the instructions at the second Council meeting in September, the chairman of the Council appointed a temporary committee to report back to the mid-winter meeting of the Council concerning the advisability of the creation of a permanent contact committee whose duty it will be to inform and co-operate with proper government officials whenever vacancies occur on boards or commissions engaged in any activity of legitimate concern to the medical profession, who will be known to these government officials as the committee to which they may apply whenever they desire to know the attitude of the medical profession. Recommendation was made that this become a permanent committee of the State Medical Association with the chairman of the Council having the appointing power at the present. The chairman of the Council appointed Councilor Crockett, chairman, and Councilors Weinstein and Padgett members of the permanent committee.

The meeting continued at luncheon which was held at the Indianapolis Athletic Club.

Reports of Standing Committees

Reports were made by the chairmen of the various standing committees of the State Association at the Council luncheon which followed.

1. Bureau of Publicity, M. N. Hadley in place of Dr. Wishard who was ill.
2. Executive Committee, A. L. Marshall.
3. Industrial and Civic Relations, F. S. Crockett.
4. Legislative and Public Policy, J. H. Hewitt.
5. Scientific Program Committee, Ernest Rupel in place of H. M. Rhorer, chairman.
6. Secretaries' Conference Committee, J. C. Burkle.
7. Report of Diphtheria Committee, Jas H. Stygal.
8. Budget Committee, Geo. R. Daniels.
9. Report on Medical Education and Hospitals, B. D. Myers.

In accordance with the action of the Council at the September meeting, the members and secretary of the State Board of Health were invited to attend the luncheon as guests of the Indiana State Medical Association. Dr. William F. King, state health commissioner, and the following members of the State Board of Health were present: J. H. Green, North Vernon; A. J. Hostetler, Lagrange; C. R. Marshall, Indianapolis, and J. A. Turner, South Bend.

Dr. Bulson made the motion that the chairman of the Council appoint a committee which shall act as a liaison committee between the State Medical Association and the State Board of Health. This committee is to be available to discuss with members of the State Board of Health any activity which is of interest to the medical profession. motion carried.

*Decrease.

Post-Graduate Work and County Society Activities.

Dr. Bulson spoke of the effective manner in which the post-graduate work is being carried on by the Michigan State Medical Society. Dr. McDonald spoke of the fact that a number of counties could combine in post-graduate courses in order that the course would cost less for each individual physician. Dr. McDonald also spoke of the importance of local men reading and taking part in the programs of their own societies. He said that in stressing post-graduate work no one should lose sight of the fact that the man who delivered the paper was after all the man who received the most benefit, due to the study and the effort that was necessary for the preparation of the paper.

Dr. Hare spoke of the post-graduate study course that was given at Evansville several years ago. He said that Evansville was fortunately situated so the post-graduate study course drew physicians from southern Illinois and Kentucky.

Dr. Hare spoke of an arrangement for handling charity work at Evansville. The secretary of the State Association was instructed to get the details from Dr. Hare concerning this work and make a report for the next meeting of the Council.

The following counties were listed as having no medical organization:

Marshall County. Due to local circumstances it is thought best not to have a Marshall County Medical Society as most of the physicians in that county belong to and attend meetings in adjoining county societies.

Starke County. No organization.

Brown County. No organization.

The White County Medical Society has been officially transferred from the tenth to the ninth district.

The Council authorized the executive secretary to attend the annual meeting of the American Medical Association at Portland, Oregon, July 8 to 12, 1929.

The Executive Committee made the following report concerning membership in the Better Business Bureau: Upon the motion of Dr. Bulson, seconded by Dr. Ross, the committee voted unanimously to discontinue membership in the Better Business Bureau as a State Association. The Executive Committee, however, recommended that the medical societies in the various cities of the state join their own local Better Business Bureau. Thus, membership in the Indianapolis Better Business Bureau is up to the Indianapolis Medical Society; membership in the Fort Wayne Better Business Bureau is up to the Allen County Medical Society, etc. The American Medical Association advocates membership in local Better Business Bureaus and is a member of the National Better Business Bureau. The Council approved the action of the Executive Committee.

Motion made, seconded, and carried unanimously that a Christmas present of \$200.00 be given the executive secretary, and a week's salary to each of the girls in the headquarters office.

Elections for 1929

Dr. William H. Kennedy and Dr. David Ross were unanimously elected as members of the Executive Committee for 1929.

Letter was received from Dr. William R. Davidson, former chairman of the Council, acknowledging vote of appreciation from the Council.

Dr. E. E. Evans, of Gary, temporary chairman, was elected permanent chairman of the Council for 1929.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 28, 1929.

THOMAS A. HENDRICKS,

Executive Secretary.

STATEMENT OF INCOME AND EXPENSES FOR 1928
AS COMPARED WITH THE BUDGET

INCOME					
	Budget Figure	Actual Income	Increase or Decrease	Requested by Committees	Allowed by Budget Comm.
Dues	\$18,900.00	\$19,166.00	\$ 266.00	-----	\$19,000.00
Exhibits	2,000.00	2,600.00	600.00	-----	2,500.00
Interest on Deposits	675.00	1,468.10	793.10	-----	1,200.00
Interest on Liberty Bonds	212.50	212.50	-----	-----	212.50
Total Income	\$21,787.50	\$23,446.60	\$1,659.10	-----	\$22,912.50
EXPENDITURES					
	Budget Figure	Actual Income	Increase or Decrease	Requested by Committees	Allowed by Budget Comm.
Executive Secretary's Office:					
Secretary's Salary	\$ 6,000.00	\$ 6,200.00	\$ 200.00	-----	\$ 6,000.00
Stenographer's Salary	3,510.00	3,202.00	308.00	-----	3,042.00
Office Rent	350.00	12.00	338.00	-----	350.00
Lights	350.00	13.00	337.00	-----	350.00
Towel Service	19.20	19.20	-----	-----	19.20
Telephone	200.00	162.00	38.00	-----	175.00
Office Supplies	300.00	468.06	168.06	-----	300.00
Postage	200.00	277.23	77.23	-----	300.00
Stationery and Printing	150.00	268.28	118.28	-----	250.00
Telegraph and Tel. Tolls	20.00	53.11	33.11	-----	75.00
Traveling Expenses—Misc.	180.80	123.80	57.00	-----	300.00
Total	\$11,280.00	\$10,798.68	\$ 381.32	-----	\$11,161.20
MEDICAL DEFENSE					
Attorney's Fees	\$ 1,000.00	\$ 1,650.00	\$ 650.00	-----	\$ 2,200.00
PUBLICITY COMMITTEE					
Clipping Service	\$ 100.00	\$ 75.64	\$ 24.36	-----	-----
Stationery	100.00	194.40	94.40	-----	-----
Postage	150.00	154.55	4.55	-----	-----
Traveling Expenses	100.00	56.05	43.95	-----	-----
Printing	100.00	-----	100.00	-----	-----
Misc.	200.00	32.35	167.65	-----	-----
Total	\$ 750.00	\$ 512.99	\$ 237.01	-----	\$ 550.00
Traveling Expenses	-----	\$ 197.43	-----	-----	-----
Postage	-----	51.50	-----	-----	-----
Printing	-----	8.76	-----	-----	-----
Entertainment	-----	4.23	-----	-----	-----
Stenographic Service	-----	15.30	-----	-----	-----
Telephone and Telegraph	-----	14.30	-----	-----	-----
Miscellaneous	-----	18.00	-----	-----	-----
Total	\$ 500.00	\$ 309.52	\$ 190.48	\$ 500.00	\$ 500.00
JOURNAL					
Subscriptions	\$ 5,400.00	\$ 5,468.00	\$ 68.00	-----	\$ 5,500.00
OTHER COMMITTEES					
Stationery	\$ 25.00	\$ 2.25	\$ 22.75	-----	\$ 25.00
Medical Education	100.00	48.60	51.40	-----	100.00
Scientific Comm. Speakers	300.00	.92	299.08	300.00	100.00
Industrial	50.00	37.00	13.00	50.00	50.00
Secretary's Conference	100.00	64.65	35.35	100.00	100.00
Total	\$ 575.00	\$ 153.42	\$ 421.58	-----	\$ 375.00
COUNCIL					
Traveling Exp.	\$ 150.00	\$ 157.85	\$ 7.85	-----	\$ 150.00
Expense of Meetings	100.00	69.35	30.65	-----	100.00
Total	\$ 250.00	\$ 227.20	\$ 22.80	-----	\$ 250.00
OFFICERS					
Treasurer's Office	-----	-----	-----	-----	-----
Auditing	-----	\$ 150.00	-----	-----	-----
Bond and Safety Box	-----	67.50	-----	-----	-----
Total	\$ 250.00	\$ 217.50	\$ 32.50	-----	\$ 275.00

ANNUAL SESSION					
Entertainment	\$ 500.00	\$ 500.00			\$ 500.00
Booths and Signs	1,000.00	708.40	291.60		850.00
Programs and Printing	200.00	109.15	90.85		125.00
Reporters	300.00	280.00	20.00		300.00
Badges	150.00	123.75	26.25		150.00
Speakers	350.00	179.70	170.30		275.00
Miscellaneous	150.00	341.61	191.61		200.00
Total	\$ 2,650.00	\$ 2,242.61	\$ 407.39		\$ 2,400.00
ATTORNEY					
Attorney	\$ 300.00	\$ 300.00			\$ 300.00
BETTER BUSINESS BUREAU					
Better Business Bureau	\$ 200.00	\$ 200.00			
Grand Total	\$23,155.00	\$21,824.92	\$1,330.08		\$23,511.20
RECAPITULATION					
INCOME					
Dues	\$18,900.00	\$19,166.00	\$ 266.00		
Exhibits	2,000.00	2,600.00	600.00		
Interest on Deposits	675.00	1,468.10	793.10		
Interest on Liberty Bonds	212.50	212.50			
Total	\$21,787.50	\$23,446.60	\$1,659.10		
EXPENSES					
Executive Secretary's Office	\$11,280.00	\$10,798.68	\$ 381.32		\$11,161.20
Medical Defense	1,000.00	1,650.00	650.00		2,200.00
Publication Committee	750.00	512.99	237.01		550.00
Public Policy	500.00	309.52	190.48		500.00
Journal	5,400.00	5,468.00	68.00		5,500.00
Other Committees	575.00	153.42	427.58		375.00
Council	250.00	227.20	22.80		250.00
Officers	250.00	217.50	32.50		275.00
Annual Session	2,650.00	2,242.61	407.39		2,400.00
Attorney	300.00	300.00			300.00
Better Business Bureau	200.00	200.00			
Total	\$23,155.00	\$22,079.92	\$1,075.08		\$23,511.20

BUREAU OF PUBLICITY

November 26, 1928

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. A. MacDonald, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held November 19 read and approved.

The release, "Bright's Disease—Part II", was again considered and finally approved for publication on Saturday, December 1.

The release, "Bright's Disease—Part I", was broadcast over radio WFBM on November 24.

Requests for speakers follow:

Nov. or Dec.—Meeting of foremen of factories for the purpose of discussing and instructing them in the prevention and first care of injuries. Muncie, Ind. Speaker to be obtained.

Delaware-Blackford County Medical Society. Speakers to be obtained on following subjects: "Sociological Phase of Medical Practice"; "Medical Economics"; "State Medicine".

Report received on the pamphlet containing an outline of the program of the Committee on the Cost of Medical Care. This report was to be considered further by the Committee.

Letter received from South Bend saying that physicians there who had had experience with undulant fever would co-operate with the Bureau in obtaining facts which could be used in a publicity article for the newspaper.

The secretary made a report upon the hospital survey for Indianapolis which recently has been completed by Dr. William H. Walsh, former secretary of the American

Hospital Association, under the direction of the Indianapolis Foundation.

The secretary was instructed to gather the facts concerning the various charges brought against Bernarr McFadden and present them to the Bureau at its next meeting.

The following bills were approved for payment:

Kee Lox Manufacturing Co.	\$.90
Wm. P. Walker	2.00
H. B. Mettel, M.D.	3.00

Total\$5.90

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 3, 1928.

WILLIAM N. WISHARD,
Chairman
THOMAS A. HENDRICKS,
Secretary

December 24, 1928

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., Chairman; M. N. Hadley, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held November 26 read and approved.

The following releases were approved by the committee:

"Christmas Hint from the Physicians" for release Saturday, December 22, 1928.

"A Healthy Hoosier Winter", for release Saturday, January 5, 1929.

The following radio releases were broadcast over station WFBM:

December 8—"Nature Curing or Physical Therapy".

December 15—"High School Basketball and Health".

December 22—"Christmas Hint from the Physicians".

According to the instructions of the Publicity Bureau, Dorland's illustrated medical dictionary was purchased for use at headquarters office.

Letter received from health officer, South Bend, Ind., stating that the material requested concerning the work that was done in St. Joseph county on undulant fever had been prepared. As yet this has not been received at the headquarters office.

Letter received from Director of Laboratory of the Indiana State Board of Health.

The Bureau was to take up and discuss at its next meeting the subject of "The Cost of Medical Care" and the proposed outline for the five-year survey which has been published by the national committee conducting this survey.

The following request for speaker was received:

Jan. 3—Fountain-Warren County Medical Society, Covington, Ind. Speaker obtained.

The following report of medical meeting was received: Dec. 6—Muncie, Ind. Exchange Club. "The Influence of Modern Business Life upon Heart Disease."

The Budget Committee allowed the Publicity Committee \$550.00 for 1929 work.

The following bills were approved for payment:

Central Press Clipping Service	\$ 7.29
A. B. Dick Company	2.50
A. B. Dick Company	4.00
The Bailey Office Supply	15.00
Central Press Clipping Service	4.20
A. B. Dick Company	3.50

Total\$36.49

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole December 31, 1928.

WILLIAM N. WISHARD, M.D.

Chairman

THOS. A. HENDRICKS

Secretary

FLOYD COUNTY MEDICAL SOCIETY

New Albany, Ind.
December 12, 1928.

The annual meeting of the Floyd County Medical Society was held at the Tavern Hotel, December 12 with a good attendance. Dr. W. H. Garner, the president, called the meeting to order and presided.

Following a brief business session, the chairman appointed the following nominating committee: Dr. J. Y. McCullough, Dr. W. A. Hall and Dr. S. M. Baxter, who placed in nomination as officers to serve the ensuing year, as follows:

President, Dr. Anna McKamey, New Albany.

Vice-President Dr. P. R. Pierson, New Albany.

Secretary-Treasurer, Dr. P. H. Schoen, New Albany.

Censors, Dr. Wm. Winstandley, New Albany; Dr. H. B. Shacklett, New Albany; Dr. F. T. Tyler, New Albany.

Motion made and seconded to accept the committee report. Motion carried.

The Secretary read a number of communications. and his annual report, which were accepted as read.

Dr. J. V. McCullough, who procured the speaker of the evening, introduced Dr. A. H. Buckmaster, of Eppingham, Illinois, the principal speaker for the occasion. Doctor Buckmaster gave an interesting and extraordinary talk on "Congenital Malphesians of the Abdomen", especially of the alimentary tract. He said those malformations seldom cause any disturbance in early life and youth, usually manifesting themselves after middle life.

mostly by persistent vomiting which cannot be relieved by medical treatment. The reason for this is lack of muscular tone and strength, breaking up the peristaltic wave before the contents are forced past the constriction. The only relief for this condition is surgical. After a free discussion by several members, Dr. Buckmaster closed the discussion.

This meeting was not only the annual meeting, but was also ladies' night. A number of the physicians' wives were present and enjoyed the occasion very much. We also had several visiting physicians with us. All in all, this was one of the most delightful meetings we have had the past year.

As usual the Tavern management served an excellent and bountiful turkey dinner, which was all that could be desired, and immensely enjoyed by all.

There being no further business, meeting adjourned.

Respectfully submitted,

W. H. GARNER, President.

P. H. SCHOEN, Secretary.

VANDERBURGH COUNTY MEDICAL SOCIETY

The December meeting of the Vanderburgh County Medical Society was held at the Evansville Public Health Center, Tuesday, December 11, at 8:00 p. m.

The following officers were elected for the year 1929: President, Dr. H. C. Ruddick; vice-president, Dr. Bernard D. Ravdin; secretary and treasurer, Dr. Keith T. Meyer; delegate, Dr. R. W. Viehe.

A symposium on "Mastoid Infection" was presented. The speakers were: Dr. H. L. Stanton, Dr. A. F. Clements, Dr. B. D. Ravdin. Dr. W. C. Dyer and Dr. M. Ravdin were the discussants.

The advisability of forming a Physicians' Business Bureau was discussed. Dr. Dyer presented considerable correspondence from a number of other successful associations of this kind in various cities in the United States. Dr. Dyer was of the opinion that the association be incorporated for \$5,000 and that 100 shares at \$25 each be disposed of as soon as possible. Eighty-five shares have been disposed of to date, with less than one-half of the physicians of the city seen.

Respectfully submitted,

KEITH T. MEYER, M.D.,

Secretary

WABASH COUNTY MEDICAL SOCIETY

December 7, 1928

The Wabash County Medical Society in their last meeting of the year, 1928, which was held at the Mellow Moon in Wabash, Thursday evening, December 6, 1928, were guests of our "Two Boys", Doctors J. T. Biggerstaff, seventy-six years old, and the venerable Doctor P. G. Moore, eighty-four years old.

An enjoyable evening and fellowship hour was spent together. Doctor Moore was called upon and gave us some reminiscences of practicing medicine fifty years ago.

Election of officers resulted as follows: chairman, Dr. E. J. Cripe, North Manchester; vice-chairman, Dr. J. L. Walker, Lafontaine; and secretary-treasurer, Dr. O. G. Brubaker, North Manchester. On motion, Chairman-elect Doctor Cripe was instructed to name the various standing committees, not otherwise provided for.

Sincerely,

O. G. BRUBAKER,

Secretary-Treasurer

HANCOCK COUNTY MEDICAL SOCIETY

The Hancock County Medical Society held its regular December meeting at the Hotel Bowman, Greenfield, on December 3, 1928.

A good attendance was present.

The following program was given by members of the association from Greenfield:

DIFFERENTIAL DIAGNOSIS OF PATHOLOGICAL ABDOMINAL CONDITIONS

1. Liver and Gall Bladder, C. H. Bruner.
2. Stomach, L. B. Rariden.
3. Intestines, E. R. Sisson.
4. Appendix, R. N. Arnold.
5. Pelvic Organs, C. M. Gibbs.
6. Other Pathological Conditions, J. L. Allen.

All of the old officers of the Association were re-elected for 1929, as follows:

President, Charles H. Bruner; vice-president, Samuel W. Hervey; sec.-treas., Joseph L. Allen; Board of Censors, L. B. Rariden, Charles M. Gibbs, W. H. Larrabee. Delegate to State Convention, Jesse E. Ferrell, Alternate delegate to State Convention, J. L. Allen, Legislative Committee, W. H. Larrabee, E. R. Sisson, J. L. Allen.

Very respectfully,
JOSEPH L. ALLEN, M.D.,
Secretary

CORRESPONDENCE

ABUSE OF STATE MEDICAL AID

December 7, 1928.

Editor THE JOURNAL:

I want to call your attention to the number of people taking the pasteur treatment by the State Board of Health. During August of this year 151 patients (all paupers of course, so signed up by the township trustee) were treated. The state pays the patients' traveling expenses, board and all expense connected with the treatment. Any sixteen year old high school boy could give the treatment after receiving one-half hour's training. I think THE JOURNAL should advocate a change in this law, allowing the patient to take the treatment at home where it could be given at much less expense. The patient would then have a chance to work every day for three weeks, in place of loafing around the State Board of Health at the expense of the state. Dr. King told me that the state board would have to comply with the law until the law is changed. He also said that he was sorry that the present hydrophobia law and the opinion of the attorney general in this matter does not permit the State Board of Health to provide serum for the treatment of indigent cases at home (?).

For the benefit of the patients and tax payers of the State of Indiana why doesn't THE JOURNAL, Dr. King, and all of the physicians of the state get busy and have the law amended?

Yours very truly,
Interested M.D.

THE TEACHING OF OBSTETRICS

Indianapolis, Ind.
Dec. 20, 1928.

Editor THE JOURNAL:

In the November 1928 issue of the *American Journal of Obstetrics and Gynecology*, there appears an article on "The Teachings of Obstetrics" by Dr. Palmer Findley, the retiring president of the American Association of Obstetricians, Gynecologists and Abdominal Surgeons. This address so completely harmonizes with the views of this association in general that the association voted that a large number of copies of it be distributed among the medical deans and the medical educators occupying important positions in medical education in America.

Leading obstetricians for many years have been exploring the teaching authorities for more time in the curriculum and better clinical facilities for teaching obstetrics. In this discussion, three things stand out prominently: First, the neophyte in medicine is presumed by the laity and medical profession to be capable of caring for the usual cases of obstetrics. He is not. Secondly, it has been generally overlooked that obstetrics is a very practical subject and not didactic, and that the teaching capacity of the ordinary obstetric case is of necessity very

limited. Thirdly, the curricula of most of the American medical schools are too much overloaded with lectures on philosophy and theory, and with a very disproportionate amount of time for general surgery which the new graduate is not expected to practice.

This article by Dr. Findley is so timely and so masterful in its presentation and argument that it seems well to give a brief synopsis of some of the leading parts. Space here precludes much detail, but it is hoped many will obtain the original article and read it in toto.

Dr. Findley starts out by saying, "At the meeting of this association held last year it was resolved to submit to the Council of Medical Education of the American Medical Association, and to the American Association of Medical Colleges, a plea for equal recognition of General Surgery and Obstetrics in the curricula of our medical schools. * * * We would not depose medicine and surgery from the high positions they have attained, we only ask that obstetrics may share with them, share and share alike.

"From the standpoint of emergencies requiring masterly and timely exercise of one's faculties, obstetrics may be fairly said to assume priority over all other departments of medical practice. Confronted with such emergencies as obstetrics presents, the practitioner has no time for sharpening his wits or for awaiting the assistance of a consultant. He is alone with his problem and he must fight alone. Chipman says: 'I have never heard it denied that in this general equipment, a large place ought in all conscience be given to obstetrics. And yet, speaking generally of our medical schools, this very training in obstetrics is the weakest page in the curriculum. Our academic vision has been blinded by the brilliancy of achievements in surgery. The glamour of the operating amphitheater has lured the student and captured his imagination.' And it is no small wonder that he has little stomach for the watchful waiting of the lying-in room. I submit that it is a thousand pities that so much time is utterly wasted on the benches of amphitheaters, watching with unseeing eyes the gyrations of the scalpel. How much more would it profit the student to employ this time in observing the phenomenon of birth under the direction of a master obstetrician. The need is for more practical training and clinical instruction in the art of midwifery, and this need can only be supplied in hospitals and dispensaries.

"I think it is generally conceded that the out-patient service is a poor substitute for the dispensary and the hospital, and in this respect most of our teaching institutions are woefully lacking, for the simple reason that they do not have adequate hospital accommodations. To send students into homes where filth abounds, unattended by an experienced clinician and with no more than a smattering of theory to sustain him, is a ghastly business and cannot be justified by lack of adequate hospital facilities. There is no more virtue in teaching obstetrics to a group of observers than in teaching operative surgery from the benches, and we all know from experience what that means. There must be direct contact and individual responsibilities if the lessons are to be driven home, and above all, it is essential that the student live for a time in an obstetric atmosphere. G. W. Theobald of London, England, says: 'When I reflect on the care, skill, teamwork and money expended in the operating theaters of our land in patching up broken men and women, and then reflect on the inadequate training which allows men to kill and cripple women in their prime, women who are performing the act for which they were created; when I consider the sum total of misery which is daily mounting through bad obstetrics; when I realize that the country of Simpson, Lister, Smellie, and Hunter is no longer mentioned in the literature of obstetrics, I feel constrained to make a plea for radical changes in the attitude toward midwifery, and to hope that these changes will be made by the profession before unnecessary and ill-directed control is exerted by the state'.

"And from another source in England we read from the pen of Comyns Berkeley that: 'The present maternal and fetal mortality and morbidity associated with pregnancy and childbirth will not be appreciably improved until the midwifery service of the country is more complete, and medical students are taught midwifery more efficiently. That in the efficient training and teaching of medical students in midwifery, the community, as opposed to the individual, is more directly and personally concerned than in that of any other subject in the medical curriculum. Not only is this so on the score of health, but also for economic reasons. The only place in which the practice and art of midwifery can be properly taught is in a maternity hospital or in the maternity wards of a general hospital. And that there are not sufficient beds available for this purpose.' The responsibility for this discrepancy lies, says Berkley, at the door of the internist and general surgeons who have never realized until quite recently the importance of midwifery to the nation, with the result that insufficient beds were allotted to the department of midwifery; too little time was provided for instruction and the facilities for teaching, laboratory and research work were inadequate. * * No less an authority than Dr. Fairbairn says that 'in the efficient practice of midwifery is to be found the greatest example of preventive medicine in the medical curriculum'.

In the report of the Committee on Maternal Welfare, the statement is made that the services of the general practitioner are proportioned about as follows: Internal medicine, 50 per cent.; obstetrics, 35 per cent.; minor surgery, fractures, life insurance, etc., 15 per cent. A study of the curricula of our medical schools showed that in actual teaching hours the ratio of obstetrics to general surgery, exclusive of surgical specialties, was as 4 to 18. Clearly then there is cause for a revamping of the curriculum if the needs of the general practitioner are to be adequately provided.

Dean Emerson of the College of Medicine of the University of Indiana says: "It is the business of medical schools to prepare students for the first two years of the practice of medicine." It is presumed that with such an equipment the graduate will acquire added knowledge and skill to the end that he may assume larger responsibilities. Assuming that the premises of Dean Emerson are reasonable, what, then, we ask, are likely to be the demands of the first two years of practice in relation to general surgery and obstetrics? A knowledge of surgical diagnosis and the ability to do minor surgery and to administer first aid in major surgical lesions would seem to be all that could reasonably be demanded of a young practitioner of medicine. But in the practice of obstetrics, there is no problem, however grave, that may not require the services of the neophyte in medicine. Placenta previa, eclampsia, ectopic pregnancy, ruptured uterus, contracted pelvis; these and many other obstetric problems may present themselves in the earliest years of practice and under conditions that admit of no opportunity to shift responsibilities. More than this it will be as incumbent upon the young practitioner, as upon the older and more experienced, to recognize the danger signals and to exercise the needed skill to avoid disaster.

And so I assume that it is indeed a reasonable request that the American Association of Obstetricians, Gynecologists, and Abdominal Surgeons make to those who are empowered to regulate the curriculum in our medical schools, that the teaching of obstetrics be given more equitable recognition, to the end that our graduates of medicine may be reasonably prepared to meet the demands of the general practice of medicine."

Here, Dr. Findley publishes in part the replies to more than 400 letters sent out by him to deans and obstetricians outside the United States. Dr. Fred C. Zappa, secretary of the Association of American Medical Colleges replied to Dr. Findley, saying in general that during an experience of twenty-three years visiting medical schools he had been thoroughly convinced that obstetrics was

receiving far too little attention. He admits he is not an obstetrician, but says that "undergraduate medical students should have more obstetric experience."

Dr. Findley goes on to say, "Maternal mortality is one-third higher in the United States than in England and Wales and more than twice as high as in Denmark, Italy, Japan, the Netherlands, Sweden, and New Zealand. The United States ranks highest in maternal mortality, the twenty-one leading nations; that we have consistently maintained a rate in excess of six per one thousand and from 1915 to the present time. And this from a nation that so blatantly boasts of its efficiency and of the magnitude of its institutions."

In closing, Dr. Findley submits the following propositions:

"1. If it is the business of our undergraduate medical schools to prepare students for the general practice of medicine, it follows that obstetrics should have a large place in the curriculum.

"2. In the general practice of medicine obstetrics far exceeds that of general surgery in importance and is only second to that of internal medicine. Such should be the relative positions of these subjects in the curricula of our schools.

"3. The demand in numbers of academic hours upon our medical students is already excessive and should be reduced. To provide more time for clinical instruction in obstetrics, without adding to the burden of the student, the didactic teaching in obstetrics, as well as in all clinical subjects, might well be restricted to the fundamentals; much of the teaching in general surgery should be shifted to graduate schools and far less emphasis should be placed upon minor specialties.

"4. The need is for more practical instruction in obstetrics and this can only be attained in hospitals and dispensaries. The service in the out-patient department, as commonly conducted in our institutions, is no adequate substitute for the dispensary and the hospital.

"5. Not less than one month should be devoted exclusively to a maternity service. In this service the student should deliver a minimum of twenty cases, under the direction of trained clinicians; and the importance of prenatal supervision should be stressed.

"6. Everywhere throughout the world it is apparent that the teaching of obstetrics is receiving more and more consideration. The medical schools of the United States are lagging far behind most schools of the world in practical instruction and this for lack of adequate clinical facilities and the time to devote to it. There must be a revamping of the entire curricula in our schools to the end that our students may be better prepared to meet the demands of the general practice of medicine.

"7. The maternal morbidity, and mortality, which in the United States has not decreased in the last fifteen years and is today the highest of the twenty-one leading nations, is chargeable to educational defects and will not be materially reduced until our institutions provide more adequate clinical facilities.

"8. From my correspondence (see appended resume) I learn that the countries in which part or all of the institutions give obstetrics and gynecology combined, equal recognition with general surgery are Russia, Poland, Ecuador and Argentina; that in Germany, France, Norway, Sweden, Holland, Italy and Switzerland the allotment is nearly equal; while England, Scotland, Wales, Canada, Australia, Egypt, Finland, India, Cuba, Czechoslovakia, Chile, Peru, Brazil, Austria, Hungary, Mexico, China, Siam and Haiti give more time to surgery than to obstetrics and gynecology, the proportion being about 2 to 1. However, it is of interest to note that in none of these countries is surgery given so large a proportion of the teaching hours as in the United States where the ratio of surgery to obstetrics is in the neighborhood of 4½ to 1.

"9. The American Association of Obstetricians, Gynecologists, and Abdominal Surgeons respectfully petition

and urge upon those who are in official of the situation to remedy this state of affairs. We ask this with no desire to unduly exalt ourselves or our specialty, but for the purpose of preparing our students for the responsibilities of their chosen profession."

A. M. MENDENHALL, M.D.

APPRECIATION OF THE JOURNAL

Waterloo, Iowa
December 26, 1928

Albert E. Bulson, M.D.,
Ft. Wayne, Ind.

Dear Doctor Bulson:

I have spent several hours very profitably reading the December issue of your State Medical Journal. If I did not write and tell you how much I appreciate it I would be an ingrate. A number of State Medical Journals are coming to my office this year, and it seems to me that your Journal heads the list in approaching the ideal of what a State Medical Journal should be.

In reaching that conclusion I am not influenced by the December issue alone.

Please accept my hearty congratulations.

Fraternally,

T. U. McManus

President Iowa State Medical Society

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Any information concerning these books will be supplied on request.

Books received since December 1, 1928:

THROMBO-ANGIITIS OBLITERANS. Clinical, physiologic and pathologic studies. By George E. Brown, M.D., and Edgar V. Allen, M.D., Division of Medicine, Mayo Clinic. 219 pages with 62 illustrations. Cloth. Price \$3.00. W. B. Saunders Company, Philadelphia and London, 1928.

PARTNERSHIPS, COMBINATIONS AND ANTAGONISMS IN DISEASE. By Edward C. B. Ibotson, M.D. (Lond.), B.S., Fellow Royal Society of Medicine, London. 348 pages. Cloth. Price \$3.50. F. A. Davis Company, Philadelphia, 1929.

TEXTBOOK OF PATHOLOGY. By William G. MacCallum, M.D., professor of Pathology and Bacteriology, Johns Hopkins University. Fourth edition, thoroughly revised. 1177 pages with 606 original illustrations. Cloth. Price \$10.00. W. B. Saunders Company, Philadelphia and London, 1928.

ACUTE INFECTIOUS DISEASES. By Jay Frank Schamberg, A.B., M.D., Professor of Dermatology and Syphilology in the Graduate School of Medicine, University of Pennsylvania; and John A. Kolmer, M.Sc., M.D., D.S., LL.D., Professor of Pathology and Bacteriology in the Graduate School of Medicine of the University of Pennsylvania. Second edition, thoroughly revised. 888 pages with 161 engravings and 27 full page plates. Cloth. Price \$10.00. Lea and Febiger, Philadelphia, 1928.

SERUM DIAGNOSIS BY COMPLEMENT FIXATION. By John A. Kolmer, M.S., M.D., D.Sc., LL.D., Professor of Pathology and Bacteriology in the Graduate School of Medicine of the University of Pennsylvania. 583 pages, illustrated with 65 engravings. Cloth. Price \$7.00. Lea and Febiger, Philadelphia, 1928.

REVIEWS:

BLOOD AND URINE CHEMISTRY. By R. B. H. Gradwohl, M.D., St. Louis, Mo., and Ida E. Gradwohl, A.B., 542 pages with 117 illustrations and 4 color plates. C. V. Mosby Co., St. Louis, Mo., 1928. Price, \$10.

This book was written for technicians and general practitioners. Seventy-five pages are devoted to description of apparatus and reagents and 73 pages to analysis of urine. Part 4 with 72 pages takes up basal metabolism. While this book is largely a compilation intended for use in a technicians' training school, the literature on these subjects seems to have been well covered.

A TEXT BOOK OF GENERAL BACTERIOLOGY. By Edwin O. Jordan, Ph.D., Professor of Bacteriology in the University of Chicago and in Rush Medical College. Ninth edition, thoroughly revised. 778 pages fully illustrated. W. B. Saunders Co., Philadelphia and London, 1928, price \$6.00.

This book is intended as a text book for students and practitioners and takes up the relations of bacteriology to the household, to agriculture, to sanitation and sanitary engineering and to various industries and technical pursuits; 55 pages are devoted to the newer aspects of immunology and 45 pages to the Parasitic Protozoa, using the new classifications of the society of American Bacteriologists. The bacterial groups are fully described in concise form, including *B. Abortus*, *Melitensis* and *Tularensis*.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

MULFORD ACIDOPHILUS BACILLUS BLOCKS.—A culture of *B. acidophilus* (Y strain), embedded in a two per cent. agar jelly containing milk powder, lactose, d-glucose and sucrose, and marketed in the form of chocolate covered cubes, each of which contains approximately 150 billion viable organisms (*B. acidophilus*) at the time of issue. For a discussion of the actions and uses of bacillus acidophilus see Lactic Acid Producing Organisms and Preparations, New and Nonofficial Remedies, 1928, p. 228. H. K. Mulford Co., Philadelphia.—(*Jour. A. M. A.*, November 3, 1928, p. 1375).

PHENTETIOTHALEIN SODIUM.—**PHENOLTETRAIODOPHTHALEIN SODIUM.**—Phentetiothalein sodium contains from 56 to 59 per cent. of iodine. It is used for the roentgenologic examination of the gallbladder and simultaneous test of hepatic function. Following the intravenous injection, the solution appears in the normal gallbladder in sufficient concentration to cast a shadow to the roentgen rays and if the liver is damaged it is retained in the blood in amounts indicative of the extent of impairment.

ISO-IODEIKON.—A brand of phentetiothalein—N. N. R. It is marketed in 2.5 Gm. ampoules. Mallinckrodt Chemical Works, St. Louis. (*Jour. A. M. A.*, November 17, 1928, p. 1549).

ETHYLHYDROCUPREINE.—This is a synthetic derivative of cupreine and is closely related to quinine. It has the anti-malarial and anesthetic action of quinine. Toxic symptoms, however, are more liable to occur than with quinine. Clinical investigation indicates that the drug may be of value in the treatment of lobar pneumonia, if a sufficient amount can be administered sufficiently early without untoward effect. To avoid such effect, it is proposed to secure slow absorption through the administration of the free base by mouth. The drug has a definite value in the treatment of pneumococcic infections of the eye.

OPTOCHIN BASE.—**OPTOCHIN.**—**ETHYLHYDROCUPREINE.**—For a discussion of the actions and uses see ethylhydrocupreine. Optochin Base is supplied in powder and in two grain tablets. Merck & Co., Inc., Rahway, N. J.

OPTOCHIN HYDROCHLORIDE.—The hydrochloride of ethylhydrocupreine. For a discussion of the actions and uses see ethylhydrocupreine. For application to the eye and instillation into the conjunctival sac, a freshly prepared 1 to 2 per cent solution is used. It is not recom-

mended for oral administration. Merck & Co., Inc., Rahway, N. J.

TABLETS PROTARGENTUM-SQUIBB, 4.6 GRAINS.—Each tablet contains 4.6 grains of protargentum-Squibb (New and Nonofficial Remedies, 1928, p. 397). E. R. Squibb & Sons, New York.

TABLETS SOLARGENTUM-SQUIBB, 4.6 GRAINS.—Each tablet contains 4.6 grains of solargentum-Squibb (New and Nonofficial Remedies, 1928, p. 398). E. R. Squibb & Sons, New York.

CAPSULES EPHEDRINE HYDROCHLORIDE-ABBOTT, 3/8 GRAIN.—Each capsule contains 3/8 grain of ephedrine hydrochloride-Abbott (New and Nonofficial Remedies, 1928, p. 176). Abbott Laboratories, North Chicago, Ill.

ANTIMENINGOCOCCUS SERUM CONCENTRATED, LILLY.—An antimeningococcus serum (New and Nonofficial Remedies, 1928, p. 359) refined and concentrated by the Banzhaf method. It is marketed in packages of one 1 cc. double-ended vial with apparatus for intraspinal injection. Eli Lilly & Co., Indianapolis.

ANTISTREPTOCOCCUS SERUM, PURIFIED AND CONCENTRATED LILLY.—A polyvalent antistreptococcus serum (New and Nonofficial Remedies, 1928, p. 361) prepared by immunizing horses against virulent strains of the various streptococcus groups. It is marketed in packages of one 10 cc. syringe and in packages of one 10 cc. vial, Eli Lilly & Co., Indianapolis.

CAPSULES EPHEDRINE SULPHATE-P. D. & Co.—Each capsule contains 0.025 Gm. of ephedrine sulphate-P. D. & Co. (New and Nonofficial Remedies, 1928, p. 178). Parke, Davis & Co., Detroit. (*Jour. A. M. A.*, November 24, 1928, p. 1633).

PROPAGANDA FOR REFORM

LENDING AID AND COMFORT TO QUACKERY.—The federal officials whose business it is to prosecute the exploiters of medical fakes and frauds have for years complained that the government is much hampered in its legal assaults on quackery by the fact that physicians of standing will sell their expert testimony to the nostrum exploiters. Regardless of the nature of the evidence or opinion, the appearance of a reputable physician on the side of the quack may lead a jury to believe that the nostrums under consideration are worthwhile and that the claims made for them are true. Recently, hearings have been held before the Federal Trade Commission in the matter of a quack "obesity cure" known as "Marmola". It is sold by one Edward D. Hayes, who at the present time does business under the trade name, "Raladam Co." He has repeatedly been prosecuted for the exploitation of quack nostrums. Marmola, according to the exploiters, has essentially the following composition: Desiccated thyroid 1/2 grain, extract of bladderwrack (*fucus vesiculosus*) 1 grain, extract of *phytolacca* 1/2 grain, extract of *cascara sagrada*, 1/4 grain, phenolphthalein, 1/4 grain. For the government, Dr. Charles A. Elliott, Solomon Strouse, and Rollin T. Woodyatt testified as to the effects of the indiscriminate use of thyroid substance by the public. Not one of these three men charged the government a cent—they donated both their time and special knowledge. At a subsequent hearing, Edward D. Hayes had expert witnesses to testify that Marmola was a scientific (!) preparation and that it was harmless when used according to direction. The men that testified to this effect were: Robert W. Keeton, Alonzo C. Tenney, Frank L. Stone, George W. Funck, Harold S. Hulbert, Samuel F. Haverstock. Each of these men is a member of his local medical society and, through that, has qualified as a Fellow of the American Medical Association. Here, then, is a sweet spectacle: the American Medical Association attempting to protect the public against quack remedies, while individual members lend aid and comfort to the exploiters of quack remedies. (*Jour. A. M. A.*, November 3, 1928, p. 1377).

TREATMENT OF TYPHOID BY SO-CALLED DETOXICATED VACCINE.—The formaldehyde detoxification principle elab-

orated by Ramon has been applied to typhoid vaccine. The method consists in incubating cultures of the typhoid bacillus with formaldehyde in such a manner that the toxic principle is destroyed while the antigenic properties remain, and is similar in principle to diphtheria toxoid (which has been admitted to New and Nonofficial Remedies). The number of cases on which this vaccine was tried does not permit the drawing of conclusions as to its value. (*Jour. A. M. A.*, November 3, 1928, p. 1378).

PERTUSSIS BACILLUS VACCINE.—Vaccine made from stock cultures has been used with a great variety of success. Certainly as used it does not prevent all cases, nor does it cure a great percentage of those who have contracted the disease. Its use is not harmful so far as we know and the reactions are slight, if any. For this reason it may seem desirable at times to use them even though results may not be encouraging. (*Jour. A. M. A.*, November 3, 1928, p. 1394).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Jecorrol (Glogau and Company) representing antirachitic potency not greater than would be found in one-tenth the volume of prime Lofoten cod-liver oil. Glandogen (Morex) (The Glandogen Company) consisting essentially of extracts of animal matter and plant extracts, including strychnine. Pas-Shon-Rub and Pro-Long-Rub (Doctor's Laboratories) the first consisting essentially of a mixture of glycerin, protein and fatty material and the second a pink ointment composed chiefly of wool fat with a small amount of formaldehyde and nitrogenous material. Double O Medicine (The Red Star Laboratories Company) a solution in alcohol and water of resins, such as those from buchu and copaiba, vegetable extractives, volatile oils and sugar. Hy'ne (The Hy'ne Company) consisting of suppositories of cacao butter containing boric acid, salicylic acid, ammonia alum, thymol and quinine. Borine (The Borine Manufacturing Company) containing essential oils, boric acid, formaldehyde, glycerin, alcohol and water. Fosfarsinol (American Tropical Remedy Company) consisting essentially of an arsenic compound, sodium, potassium and calcium glycerophosphates, a salt of strychnine and sugar, all dissolved in alcohol and water. Grant's Hygienic Crackers (The Hygienic Health Food Company, Inc.) consisting essentially of wheat, bran, flour, salt and yeast. Musser's Red Capsules (The Musser-Reese Chemical Company) containing compounds of arsenic, iron and calcium, with strychnine and an extract from a laxative plant drug. Lifo Herb Medicine (The Lifo Medicine Company) a water-alcohol solution of bitter and laxative plant drug extracts and salicylic acid. (*Jour. A. M. A.*, November 10, 1928, p. 1480).

DEATHS FROM CONTAMINATED TOXIN-ANTITOXIN.—At Bundaburg, Australia, last January, twelve of twenty-one children inoculated with diphtheria toxin-antitoxin at one time died within the next few days. An extensive investigation was made into the causes of the fatalities. The mixture used was issued in rubber-capped bottles, but without the addition of an antiseptic, in order to avoid possible risk from freezing. Each bottle was to be used at one time, but this was not done at first, and fluid was withdrawn from one bottle several times in the course of a week. The investigation brought out that the symptoms and the postmortem and bacteriologic observations were all suggestive of an overwhelming infection with staphylococci. Evidently the vial was contaminated during the previous injections, and in the absence of an antiseptic the organisms multiplied in the fluid. (*Jour. A. M. A.*, November 17, 1928, p. 1553).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drug Act: Lifo Gland Tablets (Lifo Medicine

Company) containing ingredients other than glands. W H Y (Bartlett Nu Products Corporation) consisting essentially of the water-soluble constituents of caramelized cereals dissolved in water. Phospho-Lecithin (Henry K. Wampole and Company, Inc.) consisting essentially of sodium, potassium, calcium and strychnine glycerophosphates, lecithin and sugar in dilute alcohol. B-L (Blud-Life Company) consisting essentially of epsom salt and water, with small amounts of phosphate, salicylate, iron and strychnine and red coloring matter. Depurative Gandul (The Arecibo Drug Company) consisting essentially of alcohol, potassium iodide, honey, plant extractives and water. Ferrasal (Crown Remedy Company) consisting essentially of baking soda (56 per cent.), magnesium carbonate, iron oxide, a tartrate and starch. Pildoras Matricura, Cordial Matricura and Filarysine (The American Tropical Remedy Company) the first composed of plant material, including aloes and myrrh, the second consisting essentially of extracts of plant drugs, alcohol and water, and the third contained the iodides of potassium, sodium, arsenic and mercury, with berberine, glycerin, alcohol and water. Ra'-Balm (National Radium Laboratories, Inc.) an ointment containing soap, salicylates (including methyl salicylate) and a small quantity of mineral matter but no radium. Norma (The Norma Laboratories, Inc.) consisting essentially of a water-glycerin solution of a soluble phosphate, with a small amount of plant extractives and some red coloring matter. Ra'-Aid (National Radium Laboratories, Inc.) consisting essentially of a watery solution of boric acid, zinc and sodium sulphates and chlorides, colored green with a coal tar dye and flavored with peppermint oil but containing no radium. (*Jour. A. M. A.*, November 24, 1928, p. 1650).

ABSTRACTS

TREATMENT OF LOBAR PNEUMONIA WITH CONCENTRATED ANTIPNEUMOCOCCUS SERUM

During the past two years Russell L. Cecil and W. D. Sutliff, New York (*Journal A. M. A.*, Dec. 29, 1928) have studied the specific treatment of lobar pneumonia both clinically and experimentally with especial reference to investigation of the immunologic properties and the therapeutic value of concentrated antipneumococcus serum. They conclude that refined antipneumococcus serum is a purified and concentrated derivative of ordinary antipneumococcus horse serum. It is usually prepared in a polyvalent form, containing immune bodies against pneumococcus types, I, II and III. Its potency against type I and type II is quite high. Its potency against type III is insignificant. Concentrated serum, when injected intravenously into monkeys infected with lethal doses of pneumococcus type I, promptly sterilizes the blood and causes a rapid resolution of the pneumonic exudate. When concentrated serum is injected intravenously into patients in the early stages of pneumococcus type I pneumonia, a striking clinical effect is usually obtained. The bacteria disappear from the blood and the temperature falls rapidly to normal. Even in late cases, good results are often obtained. In type II pneumonia the clinical results are not so impressive, though here again in patients treated early, favorable results are often noted. In type III pneumonia, no clinical effect has been observed. In type IV pneumonia the beneficial effect of serum is questionable. In 441 cases of lobar pneumonia treated with refined polyvalent serum, the death rate was 30 per cent. In a control series of 444 cases, the death rate was 39.2 per cent. In respect to the death rate, the refined serum produced its most striking effect in pneumococcus type I pneumonia. In a series of 153 treated type I cases the death rate was 20.9 per cent., while a control series of 147 untreated type I cases showed a death rate of 32.6 per cent. A definite but less marked effect on the death rate was observed in cases of pneumococcus type II pneu-

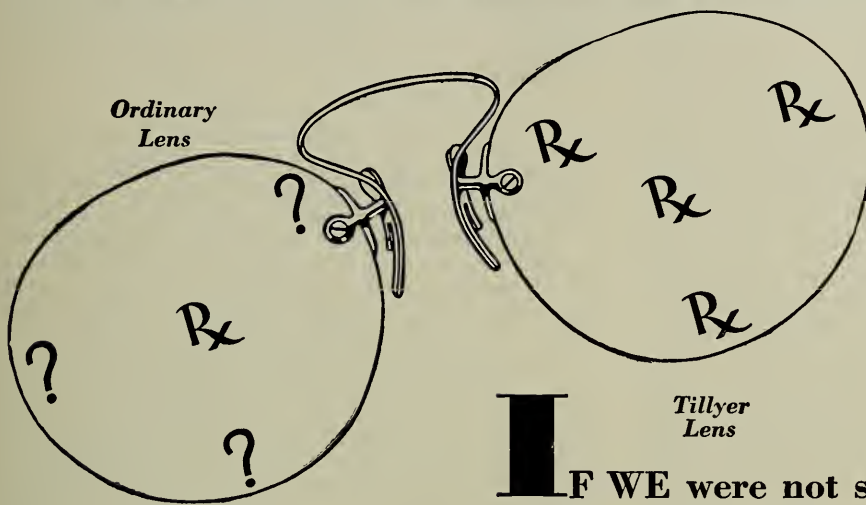
monia that were treated with concentrated serum. The serum had no favorable effect on the death rate in pneumococcus type III pneumonia. In type IV pneumonia the death rate was lower in the treated than in the untreated series, but factors other than serum may have been responsible for this difference.

MENTAL DISEASE AND INDUCTION OF ABORTION

H. Doubles Singer, Chicago (*Journal A. M. A.*, Dec. 29, 1928), discusses the relations between pregnancy and mental disease in the light of personal experience and of modern views concerning the etiology of mental diseases. Among mental diseases one can recognize two large groups: (1) those that are directly due to disturbance of brain function from disease somewhere in the body; for example, the states of delirium and confusion associated with infection and the dementias that result from actual destruction of brain tissue by diseases such as parenchymatous brain syphilis, and (2) those precipitated by conditions to be faced in the surroundings, which for some reason the patient is incapable of meeting adequately. This reason may be an inherited or an acquired deficiency in bodily constitution or it may conceivably be, in part at least, the result of faulty training. When mental disease is the result of direct injury to the brain from disease anywhere in the body, the mental symptoms do not have any significance other than that which belongs to the underlying somatic disease. The health and life of a pregnant woman suffering from such a mental disorder depend on the disease that is present and not on the mental state. Hence the question of the advisability of terminating the pregnancy under these conditions must be answered from a consideration of the underlying disease; this question differs in no way from that in other bodily diseases that are not accompanied by mental disorder. Pregnancy, when uncomplicated by accident or disease, is a normal and not a pathologic state. It cannot be the direct cause of mental disease. The accidents of pregnancy, including the toxi-infectious states of nephritis, exhaustion from excessive vomiting, and puerperal sepsis, may directly cause mental disorder. Prognosis, treatment and the question whether artificial interruption of the pregnancy is indicated depend not on the mental state but on the underlying physical condition. The state of pregnancy may be complicated by fear, and fear can be a far greater strain on the organism than pregnancy. Extreme fear will probably occur only in women of inferior constitution; the pregnancy then operates only as a precipitating factor and the real cause is some defect of construction; when this is true the problem of its termination again enters into the category of reaching a decision because of the presence of mental diseases of more constitutional character. Conditions of such intense fear must be extremely rare, and it may be suggested that the decision to terminate pregnancy should be based not on the fact of fear, however great, but on the severity of the state of exhaustion, which may be such as to endanger the life of the patient. One must realize that in some cases at least the abortion will not remedy the condition and it may possibly make matters worse. Manic-depressive disorders—known as benign for the reason that they tend to end in complete recovery, even though the patient will sometimes have subsequent attacks—are more commonly associated with pregnancy and parturition than are those of a more malignant type. One not uncommonly encounters patients who have had more or less severe manic-depressive psychoses in association with each succeeding pregnancy or parturition. Such a history may well give rise to the question of producing abortion when the patient again becomes pregnant. Singer has never advised such a course. The mental disorder is temporary and, though it may mean much suffering, is rarely a menace to the life of the patient. Furthermore, artificial termination of the pregnancy may fail to prevent the

(Continued on Adv. Page xx)

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ABSTRACTS

(Continued from page 46)

development even if it does not actually precipitate the onset of the psychosis. Abortion is unquestionably a shock and may conceivably be even more detrimental than continuation of the pregnancy. When a history is given of manic-depressive psychoses with preceding childbearing, the advisability of avoiding future pregnancies may justly be considered. Complete recovery from such psychoses is the rule, and return to health and home may mean the risk of again becoming pregnant. Under these circumstances, the performance of a sterilizing operation appeals to me as preferable to a mere warning. The more chronic forms of mental disease, described as malignant because they tend to more or less permanent mental injury—dementia praecox and the paranoid conditions—are less often precipitated by pregnancy, possibly because in persons more severely predisposed the schizophrenic characteristics themselves reduce the liability to impregnation. The possibility that the offspring may be mentally abnormal is perhaps of greater weight in cases in which there is a bad family history of mental deficiency—feeble-mindedness—or of maniac-depressive psychoses; in many cases of both these conditions, heredity has apparently played a dominant role. Unfortunately, little that is definite is known of the operation of the laws of heredity. In Singer's opinion the mental state is seldom, if ever, justification for the induction of abortion. Every case must be studied on its merits, and the determining factor in each is primarily the physical condition of the prospective mother.

HEALTH IN INDUSTRY

According to C. L. Ferguson, Portsmouth, Ohio (*Journal A. M. A.*, Sept. 22, 1928), health in industry has

been rapidly improving during the past fifteen years. The last national survey showed that more than one and a half million workers in 499 leading industries were receiving medical attention. The efficiency of the worker is increased and his lost time due to illness is reduced by the finding and removal of foci of infection. The best results are accomplished by the proper combination and coordination of the five functions: 1. A company policy which insists on the best health obtainable. 2. Conscientious medical examinations made annually or semi-annually. 3. Routine dental examinations which include x-ray films. 4. A constant desire to improve working conditions. 5. A cooperating and insistent group of executives.

INCOMPLETE REMOVAL OF TONSILS BY ELECTRODESICCATION

The procedure known as electrodesiccation of the tonsils was carried out by one skilled in the technic. A piece of diseased tonsil was covered over by a fairly thick, smooth, white scar. The appearance of the throat some months later was such as to warrant a laryngologist in saying that there had been a complete removal of the tonsil. It may be said that portions of diseased tonsil are frequently left following surgical tonsillectomy. That is true, but it is only by electrodesiccation that such fragments can be so completely hidden from view. In spite of the improvement which has been made in the technic of destruction of the faucial tonsil by high frequency current, Frank J. Novak, Jr., and Michael Zeller, Jr., Chicago (*Journal A. M. A.*, Dec. 29, 1928), do not see any evidence of sufficient validity to change their opinion that the method is inadequate and unsatisfactory, and that it cannot in any manner compete with the accepted present-day methods of surgical tonsillectomy.

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ORIGINAL ARTICLES

THE ANALGESIC AND ANESTHETIC PROPERTIES OF SODIUM ISO- AMYLETHYL BARBITURATE

(PRELIMINARY REPORT)

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This preliminary report is concerned with the use of sodium iso-amylethyl barbiturate for the production of analgesia and anesthesia in man. This and other barbituric acid derivatives have been known to possess anesthetic properties when injected or given orally to animals. Page and Coryllos¹ found that the average minimum effective anesthetic dose of sodium iso-amylethyl barbiturate was about thirty-five milligrams per kilogram when administered intravenously to dogs. Eddy² has shown that approximately fifty to sixty percent of the fatal dose, given orally, was required to produce general anesthesia in cats, and that the average fatal dose was about one hundred milligrams per kilogram. Swanson³ found that, in the routine intravenous administration of this salt for the production of anesthesia in animals (rabbits, cats and dogs) forty-five to sixty milligrams per kilogram was necessary before actual operative procedures could be carried on satisfactorily.

In man, we have found that fifteen to twenty-five milligrams per kilogram has usually produced surgical anesthesia adequate for most types of operations. Man must be more susceptible to the anesthetic effects of this drug since he required only one-third to one-half the amount necessary to produce surgical anesthesia in animals. Jackson⁴ found that man is also more susceptible to the hypnotic effects of iso-propylethyl barbiturate, a related compound, and suggests that the higher psychic centers of man's cerebrum probably accounted for his increased susceptibility over that of the dog. In regard to the heart, circulatory organs and respiratory apparatus, he states that it seems probable that no great difference exists between man and the dog.

The lethal dose of sodium iso-amylethyl barbiturate for man is unknown; consequently, we have set twenty-five milligrams per kilogram of body weight (up to a total amount of twenty-five grains) as the maximum dose to be given intravenously for the production of anesthesia. Barbituric acid compounds decompose readily if allowed to stand in solution; therefore, we have used only highly purified stable preparations of the sodium salt. A ten percent solution was prepared immediately before use by adding triple distilled sterile water to the sodium salt and gently agitating until all crystals were dissolved. The solution should be nearly water clear; any opalescent solutions should be discarded. If a clear solution be allowed to stand exposed to the air for a few hours, slight opalescence may occur.

The drug should be given before the patient has been taken to the anesthetic room, as this technique eliminates the fear of the anesthetic and operation and the psychic stimulation of transportation, etc. The usual preanesthetic preparation of the patient should be employed, as with other general anesthetics. Morphine, when indicated, may be given a short time before the intravenous injection of the sodium salt. It is our opinion that everything conducive to the induction of general anesthesia with inhalation anesthetics should be employed when sodium iso-amylethyl barbiturate is to be given.

The rate of the intravenous injection should not greatly exceed one cubic centimeter per minute.

Induction of Anesthesia. Within three to five minutes after the intravenous injection of the drug was begun, the patients became drowsy and fell into a profound sleep. Usually seven to ten grains were required to render the patients unconscious, although the amount has varied with individual patients. As a rule, they were carried rapidly through the stages of anesthesia so that excitement, laryngospasm, etc., were rarely observed. Within ten to fifteen minutes time, the common reflexes were absent, except the pharyngeal, sphincters, and occasionally the skin reflex.

Doses of fifteen to twenty, and not exceeding twenty-five grains, produced light to deep surgical anesthesia within fifteen to twenty minutes

time. When smaller doses were given, such as five to ten milligrams per kilogram, the degree of muscular relaxation and anesthesia was less pronounced. It was possible, by carefully watching the patient during the time the injection was being made, to produce analgesia without rendering the patient unconscious. The amount required for this purpose seldom exceeded five grains.

Effects on Respiration. When amounts of the drug adequate for surgical anesthesia were given, the effects on the respirations were somewhat in contrast to those observed with inhalation anesthetics. The respirations were regular, were usually increased in rate, and frequently were reduced in amplitude. There was little change in the color of the skin, although a slight degree of cyanosis occasionally has been noted. The administration of ether or nitrous oxide and oxygen in combination with this anesthetic increased both the rate and the amplitude of the respirations.

Effects on Pulse Rate and Blood Pressure. The pulse rate occasionally was unchanged, but, as a rule, slight increases were observed during and shortly following the injection of the drug. The patients who had an increase in pulse rate because of excitement, etc., before starting the injection showed a decrease when they were anesthetized. Stimulation during the operation frequently has caused a temporary increase in the pulse rate.

Decreases in blood pressure were observed during the time the injections were being made, but shortly afterward they reached their previous levels. Those patients who were nervous and excitable before the anesthetic was given had an elevation of blood pressure, but during anesthesia the blood pressure returned to its normal level. Traction and pressure on the abdominal organs during the operation produced an increase in blood pressure. Decreases of from twenty to thirty points (systolic) have been observed during the operation, particularly in those patients with unstable cardio-vascular systems. Bleeding in the operative field was no greater than that usually observed with inhalation anesthetics, and the blood had a good color. A moderate degree of hypotension or hypertension is not a contraindication to the use of this drug for anesthesia.

DOSAGE AND USES

The dosage has been found to vary somewhat with individual patients. There is a rough relationship, however, between the amount required to produce a given effect and the weight of the patient. Very elderly and very thin patients required less of the drug than did those of middle age and those in good health. Less was required by those whose resistance was lowered because of chronic infection, prolonged illness, etc. The type of operation and the nature of the patient were other factors that frequently influenced the dos-

age. These details make it difficult to apply any fixed rule in regard to dosage. From our experience we recommend the following dosage which, in our hands, usually has been adequate for the effects desired.

For Control of Convulsions. The use of this drug for the control of convulsions in eclampsia was decidedly more effective than large doses of morphine or other therapeutic measures commonly employed. Its use in controlling convulsions caused by strychnine, cocaine and novocaine poisoning, tetanus and rabies was equally spectacular. Usually muscular relaxation and sleep were obtained within a few minutes after the injection was begun. As a rule ten to fifteen milligrams per kilogram was sufficient to keep the patient quiet for from six to ten hours.

Use in Obstetrics. About thirty obstetrical patients have been given small amounts of the drug intravenously in order to obtain analgesia. This group is too small to draw conclusions; however, labor seemed to be facilitated and the patients were able to rest between pains. Usually the labor pains were less acute in character, and, in a few instances, the babies were delivered without the knowledge of the mother. Large doses, adequate for anesthesia, stopped labor pains. Only small doses (three to eight grains), therefore, have been given. Usually one injection during the first stage of labor and a second, if needed, during the third stage produced the most satisfactory results.

There were no untoward effects produced in the babies, and, by approximate estimation, there was no increase in the postpartum loss of blood. The work done in this field is inadequate, but we believe it to be of sufficient interest to warrant further study by obstetricians who are thoroughly familiar with the use of analgesics.

Use in Minor and Orthopedic Surgery. Ten to fifteen milligrams per kilogram was sufficient for light anesthesia such as that desired for the reduction of dislocations, setting of fractures, tendon repair work, etc. The prolonged anesthesia was particularly advantageous when the procedure required much time. The sleep and quiet which followed was highly desirable when casts were applied as it permitted them time to set in their proper positions.

Use in Major Surgery. (a) Combined with Local Anesthesia—The combined use of sodium iso-amylethyl barbiturate intravenously and local infiltration of the skin with procaine has produced adequate anesthesia for essentially any major operation. It has seldom been necessary to give more than ten to twenty grains of the drug. The combined use of these drugs has obviated many of the difficulties encountered when procaine was used alone, particularly in operations of the abdominal contents. All apprehension and fear of

the operation is eliminated. According to Loevenhart,⁵ Isenberger⁶ and others, barbituric acid derivatives prevent and control the toxic symptoms of procaine poisoning. Sodium iso-amylethyl barbiturate is, then, within certain limits, a safeguard to the patient. The additional degree of anesthesia obtained through their combined use eliminated the restlessness and sense of pain experienced when traction was made on the abdominal organs, which could not be eliminated by the local use of procaine unless used intraspinaly or for nerve blocking. The two latter methods have met with success in the hands of experts, but are not satisfactory for routine practice. This combination is advantageous in those patients who have some contraindication to the use of general inhalation anesthetics, or when the method of administering the anesthetic interfered with the operation.

(b) Combined with Nitrous Oxide or Ether—The amount of nitrous oxide and oxygen required by inhalation, when used in combination with fifteen to twenty grains of sodium iso-amylethyl barbiturate given intravenously, was reduced from fifty to ninety percent over the amount necessary when used alone. The degree of anesthesia was about equal to that obtained with ether, and the depth of anesthesia was more uniform. The increased amount of oxygen which could be given in proportion to the nitrous oxide kept the patient's color good.

In operations on the thyroid gland and on the abdominal contents, this combination anesthesia has a useful field. The degree of muscular relaxation in abdominal operations has enabled the surgeon to do most any type of operation which could have been done only with great difficulty using nitrous oxide and oxygen alone.

In thoracic surgery this combination has been advantageous, especially where the total amount of functioning lung tissue was materially reduced. It has enabled the anesthetist to obtain surgical anesthesia for a prolonged period without producing a marked degree of cyanosis.

When fifteen to twenty grains of sodium iso-amylethyl barbiturate, given intravenously, was combined with ether, the excitement stage and the sense of suffocation resulting from the induction of anesthesia with ether was eliminated. The amount of ether required was greatly reduced. In one instance only one gram of ether was necessary for an operation requiring one and one-half hours. Postoperative nausea, retching and vomiting was entirely eliminated. It is our impression that the anesthesia produced in combination with ether was not as satisfactory as that obtained in the combination with nitrous oxide and oxygen.

(c) Sodium Iso-amylethyl Barbiturate Used Alone—The amount of sodium iso-amylethyl barbiturate, administered intravenously, for the pro-

duction of surgical anesthesia has ranged between fifteen and twenty-five milligrams per kilogram, not exceeding a total amount of twenty-five grains. These amounts have produced anesthesia in about eighty-five percent of the cases. Up to this time, we have used this anesthetic alone in those instances where it was inconvenient to administer inhalation anesthetics, or in which unusually long operations were anticipated. In brain surgery it is ideal; the operations are usually very long; and there is no interference in the operative field, eliminating one possible source of contamination. Fifteen to twenty milligrams per kilogram of body weight has produced anesthesia satisfactory for surgery of the mastoid bones. Here again the freedom of the operative field is appreciated by the surgeon.

POSTOPERATIVE STATE

Following surgery, the patients who had been given fifteen to twenty-five grains of the sodium iso-amylethyl barbiturate, alone or in combination with other general or local anesthetics, remained unconscious for from one to five hours and occasionally longer. In a few instances they have been conscious before leaving the surgery. This occurred particularly in those cases where there was a high basal metabolic rate. When the drug was sufficiently eliminated or oxidized, the patients passed through a mildly restless period, which, as a rule, preceded the regaining of consciousness. During the restless stage, which was of comparatively short duration, the patients tossed their arms aimlessly about, and often attempted to move about in an uncoordinated fashion, but not violently. Occasionally they uttered incoherent statements. It has been our experience that the administration of small doses of morphine at this time has been sufficient to keep the patient quiet until full consciousness was regained. Some patients aroused clearly from their sleep without any period of restlessness. After consciousness was regained, they were drowsy, and continued to sleep at intervals, but their cooperation was readily attained for the administration of fluids, etc.

Very often the patients did not remember incidents and conversations that occurred during this time, although they apparently were conscious. Temporary disturbances in vision, lasting for a few hours, were observed in two instances following the regaining of consciousness. Nausea, retching and vomiting occurred in only one instance and was thought to be due to a sensitivity to morphine. Headache and other "hang-over" symptoms, resulting from the use of some barbituric acid compounds, rarely occurred with the use of sodium iso-amylethyl barbiturate.

When smaller amounts of the drug were used, the patients awoke somewhat sooner. In those instances where only three to five milligrams per kilogram were given, the sensorium was only

mildly depressed and the patients did not, as a rule, lose consciousness. Usually they were drowsy and slept at intervals for several hours, but they could be aroused for nourishment, fluids, etc.

The usual postoperative rise in temperature and pulse rate occurred. These increases were apt to occur somewhat sooner than those observed following inhalation anesthetics. There was no difference noted in wound healing and the convalescence of the patients was apt to be somewhat shortened.

METABOLIC STUDIES

About twenty patients who were given amounts of the drug adequate to produce surgical anesthesia were observed for certain metabolic disturbances. Determinations of the blood non-protein nitrogen, blood sugar, blood CO₂ combining power and examinations of the urine were made before, during, and at three-day intervals for ten days following surgery. In nearly every instance, when the blood sugars were low before the anesthetic was given, they increased to normal immediately after the operation. There was a tendency for the blood non-protein nitrogens to drop somewhat lower than normal during the first day or two. The CO₂ combining power did not show any appreciable changes during the time that the patients were anesthetized. The examinations of the urine were negative although large amounts of urates were found to be present for the first twenty-four hours after surgery.

No studies were made on the manner of elimination of this drug. It seems probable that it is eliminated in a manner similar to that of barbituric acid, being partly oxidized and partly excreted by the kidney. From our clinical observations, it seems that the rapidity of elimination varies somewhat in different individuals.

COMMENT

The production of anesthesia by any means is always a matter of grave importance. Consequently, the use of this drug in combination with other general or local anesthetics must be subjected to profound study before recommending its general use. No conclusions have been drawn from this preliminary work because we realize that a study of three hundred patients is a comparatively small series from which to form opinions concerning the value, safety, contraindications and limitations of this compound.

There are, however, certain objectionable features which we can apply to this method in general. The intravenous administration of any drug which cannot immediately be removed from the system demands an effective antidote. We believe that the use of ephedrine sulphate (twenty-five to fifty milligrams) and caffeine sodium benzoate⁷ (one gram), injected intramuscularly for two or three doses three hours apart, exerted a counteracting influence in both animals and man.

The prolonged period of narcosis following surgery is a second objectionable feature, especially if the surgeon, during this time, is faced with acute hemorrhage or other complications demanding immediate attention. As a rule, however, the patients were very grateful for the sleep which followed the operation, and preferred its use to that of other general anesthetics.

We believe that this drug may prove to be useful when used in comparatively small doses in combination with other general or local anesthetics, but that its administration should be confined to those thoroughly familiar with the methods and principles of anesthesia.

We are greatly indebted to the visiting staff and to the resident surgical staff of the Indianapolis City Hospital for their splendid cooperation in this problem. We also wish to acknowledge with grateful appreciation the work which has been done at the University, Methodist, St. Vincent's, and Indiana Christian Hospitals.

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THE PHYSICIAN AND THE WORKMEN'S COMPENSATION ACT

FRANKLIN S. CROCKETT, M.D., AND
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When the legislature of the year 1915 passed the Indiana Workmen's Compensation law the rights and duties of many persons were seriously affected. Among other classes of persons it affected the physicians of Indiana and even now after fourteen years the knowledge of the law and its workings, is not general. The law has been amended by several subsequent legislatures, and has been passed upon by the courts in an effort to make it clearer, stronger and fairer to all parties.

The physicians of the state were affected through the provisions whereby their charges for services to injured employes became a part of the compensation awards, and through the duties imposed by the law in relation to accidents and injuries. The title of the act when first passed read in part, "An act to promote the prevention of industrial accidents; to cause provision to be made

for adequate medical and surgical care for injured employees." From which wording it can be observed that accident prevention was the primary object of the act and that after the preventable accident was safeguarded against, insofar as possible, the inevitable accident must secondarily be taken care of. The physician is always **needed** when the inevitable accident occurs.

In order to insure a reasonable charge being made, the law provides that fees of attorneys and physicians and charges of hospitals for services in connection with the administration of the act shall be subject to the approval of the Industrial Board, the body created by the law to enforce the act (Section 65). Doctors attend injured employees under two different methods; either by a general contract with the employer to care for all the injuries sustained by the employees of the employer's particular business, or by the individual case that comes to the practicing physician in the general course of business as the emergency arises. A court decision has defined the duties of the Industrial Board as to their jurisdiction of these two methods. In the record case of *National Car Coupler Co., et al, v. Sullivan*, 126 N. E. 494, originally brought by Arthur Sullivan to recover for services rendered under a general contract to treat employes of the National Car Coupler Company, at Attica, Indiana, and for which services he was allowed a certain recovery by the Industrial Board, it was declared by the appellate court that the board had no jurisdiction and directed the dismissal of the case. The opinion recites that it was the apparent intention of the legislature to divide the fees of physicians into two classes, that of physicians under a general contract of employment, holding that class not under the jurisdiction of the board, and that of physicians called to treat injured employees in an emergency, holding this class in their charges to be subject to the approval of the board. Section 65 was interpreted as not intending to enlarge the authority of the board with reference to approval of physician's charges beyond that provided for in Section 25 in case of an emergency, or because of the employer's failure to furnish a physician, or when the injured is justified in procuring the services of a physician other than the one furnished by the employer. Under Section 65 an appeal lies from the order of the full board approving the charges of a physician. It is provided in this section also that the board may withhold approval of the fees of the attending physician unless he shall file his report on the form prescribed by the board.

Any emergency injury case reaching the busy doctor may turn out to be a compensation case, with his charges for services subsequently being subject to the approval of the Industrial Board, and imposing certain duties much different than attends the individual and personal patient. How

is the doctor to determine what is a compensation case?

Stated in a general way an employee hurt while at work, and because of some danger connected with it, is a compensation case, and comes under the law. The idea back of the compensation law is that industry should bear the cost of its accidents; that this cost should be added to the selling price of the product and paid ultimately by the consumer. Differing from the old system of court damage suits, the question of whose fault the accident is, or of negligence, is not considered. And further, the law has the object that the payment for the injuries should be prompt and certain. Employers must insure under a policy with standard provisions, or show a solvency sufficient to make them exempt, which makes all judgments good. The doctor may not get all the money he wants for his work, but he gets paid, and gets paid quicker, which is a vastly different result than usually happened under the old damage suit arrangement.

As the law is given a broad and liberal interpretation in order that the humane purpose of it may be fully realized, and because all accidents arising in industry must be reported by employers whether exempt or not from the provisions of the law, the doctor is safe in considering any injury a compensation case even when there is apparently nothing but a casual connection between it and the performance of some service of employment. As to what are compensable cases the decisions include the following:

Drinking poison by mistake, believing it to be water, is an accident. *Archibald v. Ott*, 87 S. E. 791.

A wasp sting may be an accidental injury within the meaning of the act. *Coastwise, etc. Company v. Folsom*, 103 Atl. 478.

An occurrence which merely hastens an existing disease to its final culmination is an accident within the meaning of the Workmen's Compensation Act. *Utilities Coal Company v. Herr*, 132 N. E. 262.

Unusual exertion in pushing a wheelbarrow up a steep grade, resulting in rupture or hemorrhage of the spinal cord, is an accidental injury arising out of the employment. *State v. Puhlman*, 162 N. W. 678.

Injury by lightning may be due to an accident arising out of the employment. *State, etc. v. District Court*, 129 Minn. 502.

"Bursitis or housemaid's knee" resulting from a workman being on his knees for four or five days scraping floors is an accidental injury. *Standard, etc. v. Landgrave*, 132 N. E. 661.

The inhalation of gas fumes has been held to be an accident. *Naud v. King, etc., Co.*, 159 N. Y. S. 910.

A night watchman was closing a window against a storm and while so doing foreign matter

was blown into his eye resulting in loss of sight, the accident being held to have arisen in the course of his employment. *Kobyra vs. Adams*, 162 N. Y. S. 269.

Claimant temporarily ceased work and went to the toilet. Feeling something strike her arm she looked through a crack into an adjoining toilet, when a girl therein thrust scissors through the crack into claimant's eye, destroying the sight thereof. *DeFillipis v. Falkenburg*, 219 N. Y. 581.

The duties of an employee required him to carry meat. He wore an apron which became greasy from his work. An elevator which he was accustomed to use in his work became fast. While waiting for it to be freed, he sat down on a nail keg seven feet from the elevator, and about four feet from the fire box of the boiler, used as a part of the employer's equipment. He fell asleep, his apron caught fire from the fire box of the boiler, and he was severely burned. *Richard v. Indianapolis Abattoir Co.*, Conn., 102 Atl. 604.

These are but a few of the many accidents hitherto held as coming within the meaning of the law, and are cited to show how liberal is the viewpoint maintained and how unusual any case may be.

In Indiana, the act does not apply to railroad employees engaged in train service. (Acts 1917, p. 673). These are employees engaged in interstate or foreign commerce, as contemplated by the federal Compensation Act. The act also does not apply to casual laborers, nor to farm or agricultural employees nor to domestic servants, nor to employers of such persons unless they elect to be bound by filing their voluntary election with the Industrial Board. A casual laborer is one employed not in the usual course of the trade, business or occupation, or profession of the employer. As either an employee or employer may elect not to operate under the law, the doctor should at once ascertain the exact status of both.

During the first thirty days after the injury the law provides that the employer shall furnish or cause to be furnished free of charge to the injured employee an attending physician for the treatment of his injuries, and in addition thereto such surgical, hospital and nurse's services and supplies as the attending physician or the Industrial Board may deem necessary. The employee must treat with the company or employer's doctor unless in an emergency, or because of the employer's failure to provide such attending physician, or for other good reason, a physician other than that provided for by the employer treats the employee. The refusal of the employee to accept the company doctor bars the employee from all compensation during the period of such refusal unless in the opinion of the Industrial Board the circumstances justified the refusal. The board is charged with the approval or disapproval of the

doctor's charges when the doctor is not the company or employer's doctor. When approved the employer pays the charges. In a following section the pecuniary liability of the employer for medical, surgical and hospital service is limited to such charges as prevail in the same community for similar treatment of injured persons of a like standard of living when such treatment is paid for by the injured person.

A very important thing for the physician to remember is that at the end of this thirty-day period of free service, the employer is not bound by further charges unless required by the board, and only in that event for another thirty-day period. And during the whole or any part of the remainder of the period of disability or impairment resulting from the injury, the employer may continue to furnish such physician's services and supplies. If the doctor anticipates collecting for his services from the employer he should, before the end of this free period, reach an understanding with the employer for further treatment of the employee if necessary. The compensation award by the board is not subject to levy upon execution. The receipt of the award upon the part of the physician is final; he cannot sue for a "balance" later. If the award is not satisfactory the act provides for an appeal. The amount is always fixed by the board according to the current charge in the community for like service, and not according to the financial worth of the employer or the insurance carrier.

Some of the interesting decisions arising under this section of the act follow:

A workman met with an accident on February 17, 1916, but the injury resulting therefrom did not become manifest until March 19, or on the thirty-first day after the accident. The employer was required to furnish medical aid for thirty days, commencing March 19. In *re McCaskey*, 117 N. E. 268.

Where nature and extent of employee's injury, consisting of femoral hernia, was not ascertained until nearly a month after date of injury it was held the thirty-day period to which employee is entitled to recover medical treatment does not begin to run until it is possible to establish by legal proof that his injury was due to his employment. *Millspaugh and Irish vs. Lunte*, 144 N. E. 147.

An injured employee persistently refused medical treatment provided by the employer, and relied upon prayer in accordance with the belief of the "Holy Rollers", whereby recovery was retarded and the period of disability was prolonged. Compensation denied. *Williams v. Diamond Coal Co.*, 11 N. and C. C. A. 1219.

Injured employee personally liable for medical and hospital services after refusing those offered. *Indiana Liberty Mut. Ins. Co. vs. Strate*, 148 N. E. 425.

The refusal of an injured employee to submit to a surgical operation will deprive him of compensation in those cases only in which the operation is not attended with substantial danger to his life, or health, or extraordinary suffering, and, according to the best medical and surgical opinion, offers reasonable prospect of restoration or relief from the incapacity resulting from the injury, *Vonnegut Hdw. Co. v. Rose*, 129 N. E. 608.

Disability, impairment of health, or death, resulting from an operation performed by a surgeon furnished by the employer is attributable to the original injury. *National Rolling Mills v. Kish*, 139 N. E. 454.

A surgical operation was performed on an employee because of an injury. The operation resulted in an ankylosed joint, and it was held that this condition was proximately caused by the injury. *Vaslento v. Kassenetz*, 180 N. Y. S. 651

Any aggravation of the disability, or impairment resulting from an injury, which is due to the malpractice of the physician furnished by the employer to treat the injury, is compensable as a consequence of the original injury. *Pawlak v. Hayes*, 156 N. W. 464.

The Indiana law provides that after an injury and during the period of disability, the employee, if so requested by the employer, or ordered by the Industrial Board, shall submit himself to examination at reasonable times and places, by a duly qualified physician and surgeon designated and paid for by the employer or Industrial Board. The employee shall have the right to have present at any such examination any duly qualified physician or surgeon provided and paid for by him. And this important provision to every doctor called in at such examination is made: No fact communicated to, or otherwise learned by any such physician or surgeon who may have attended or examined the injured employee, or may have been present at any examination, shall be privileged, either in the hearings provided for in this act, or any action at law brought to recover damages against any employer who may have accepted the compensation provisions of this act. "It is also provided in this action that the employer, or the Industrial Board, shall have the right in any case of death to require an autopsy at the expense of the party requiring same." It will be noted that in this section there are two instances where physicians must look to the injured employee for payment, and in those cases the doctor should secure his payment unless he cares to run the risk of being unable to collect later. Two cases here are of interest:

Opinions and conclusions of physicians making personal examination of patient are ordinarily entitled to great weight in determining his physical condition in proceedings for compensation. *Silvey v. Panhandle Coal Co.*, 154 N. E. 778.

Employee held entitled to compensation for x-ray burns received while being examined at request of employer. *Lincoln Park Coal & Brick Co. vs. Ind. Comm.*, 148 N. E. 79.

The accident reports and the reports of attending physicians are the private records of the Industrial Board, open to the inspection of the employer, the employee, or legal representatives, but not to the public unless in the opinion of the board, the public interest shall so require.

The Industrial Board being an administrative body, not a court, cannot issue executions to enforce the payment of its awards. Section 73, division (d) providing what every policy any insurer issues must contain states: "That the insurer will promptly pay to the person entitled to the same, all benefits conferred by 'the Indiana Workmen's Compensation Act', including physician's fees, nurse's charges, hospital services, hospital supplies, burial expenses, and all installments of compensation or death benefits that may be awarded or agreed upon under said act; that all claims for compensation, nurse's charges, hospital services, hospital supplies, physician's fees, or burial expenses may be made directly against either the employer or the insured or both." The last paragraph provides that upon the insurer failing or refusing to pay, the Industrial Board shall revoke the approval of its policy form, and shall not accept any further proofs from it until it shall have paid said award or judgment, or complied with the violated provisions of the act, and this has proven more effective than any judgment or execution.

An insurance carrier is bound by the order of the insured employer to extend medical aid beyond the first thirty days after the injury. *Kirkhoff Bros. v. McCool*, 116 N. E. 439.

An insurer served written notice of cancellation of policy upon the employer more than ten days prior to the injury, but failed to file such notice of cancellation with the Industrial Board. The cancellation was not effective. *Hamberger v. Wolfe-Smith Co.*, 200 N. Y. S. 803.

Section 64 of the act provides "The board or any member thereof may, upon the application of either party or upon its own motion, appoint a disinterested and duly qualified physician or surgeon to make any necessary medical examination of the employee and testify in respect thereto. Said physician or surgeon shall be allowed traveling expenses and a reasonable fee to be fixed by the board, not exceeding ten dollars for each examination and report, but the board may allow additional reasonable amounts in extraordinary cases. The fees and expenses of such physician and surgeon to be paid by the state.

The Indiana act includes definitions of words and their scope of meaning as contemplated when used in the wording of the law. Some of these are of interest to the physician.

"Employer" includes the state and any political division, any municipal corporation within the state, any individual, firm, association or corporation, or the receiver or trustee of same, or the legal representative of a deceased person using the services of another for pay.

"Employee" includes every person, including a minor, lawfully in the service of another under any contract of apprenticeship or hire, written or implied, except one whose employment is both casual and not in the usual course of the trade, business, occupation or profession of the employer. Any reference to an employee who has been injured shall, when the employee is dead, also include his legal representative, dependents and other persons to whom compensation may be payable."

Whether or not a workman is an employee is generally a question of fact. *Nissen v. Miller*, 129 N. E. 652.

In determining whether a workman is an employee the act should be liberally construed, even to the inclusion of cases within its reason although outside the letter thereof. *In re Duncan*, 127 N. E. 289.

A brick mason, employed by a building contractor, furnishing all the materials to build fire places of a specified size, furnishing and using his own tools, who engaged the men working with him, and received only the union scale and the usual foreman's fee, was an employee. *Jensen v. Industrial Acc. Comm.*, 207 Pac. 1019.

One unloading coal for a railway and lighting company at five cents a ton, hiring and paying his own help, has been held to be an employee. *Decatur, etc. Co., v. Industr. Brd.*, 114 N. E. 915.

A physician's chauffeur was killed while using his employer's auto in a joy ride with his friends. His death was not due to an accident arising out of and in the course of his employment. No recovery allowed. *Lansing v. Hayes*, N. Y. S. 328.

Another case cited with the approval by the Appellate Court of Indiana is that of *Claremont, etc. Club v. Industr. Acc. Comm.*, 163 Pac. 209. In this case the following facts were brought out: A boy fourteen years old, in the service of the country club as a caddy, was directed by the caddy master to assist a golf player who had requisitioned his services. During the game he was under the control of the player, who paid the caddy master an amount agreed upon for the boy's services. It was held that the caddy boy remained an employee of the club.

"Injury" and "personal injury" under the Indiana act means only injury by accident arising out of and in the course of the employment and shall not include a disease in any form except as it shall result from the injury.

The compensation act affords no relief against general disease. It is not a scheme for health insurance. It deals only with personal injuries fol-

lowing as an immediate result from the employment as the direct cause. It awards compensation for a disease only when the disease fairly may be termed a personal injury. *In re Maggelot* 116 N. E. 972.

"Pain is not a disease, nor is disease resulting in pain a personal injury." *Pimental's case*, 127 N. E. 424.

Among the diseases which have been held to be either accidental injuries or to result therefrom are the following: Insanity, paralysis, cancer, diabetes, peritonitis, appendicitis, typhoid fever, tuberculosis, pneumonia, nephritis, ptomaine poisoning, blood poisoning, epilepsy, pericarditis, influenza, apoplexy, paresis, arsenical poisoning, caisson sickness, anthrax and erysipelas. As to hernia it has been held in New York that hernia is a disease arising out of natural causes as well as from accident. *Cavalier vs. Chevrolat*, 178 N. Y. S. 489. However, it has been held in Indiana that it is not necessary that there be an accident, external to the body of the workman, or a mishap in the environment which results in hernia. *Terre Haute etc. Co., vs. Wehrle*, 132 N. E. 698.

Compensation procedure involves making out certain reports. Blanks are furnished by the board. Injuries to employees must be reported without regard to whether or not the employers are subject to the compensation provisions of the act. It is necessary, therefore, for each of the following to report injuries of their employees: Employers who have exempted themselves from the compensation provisions of the act, employers who have failed to comply with its insurance provisions, employers of farm laborers, employers of casual employees, and employers of domestic servants. All blanks should be carefully and promptly filled out and dispatched to the office of the board, State House, Indianapolis, Indiana.

Hearings upon claims are usually before a single member sitting informally in the county seat of the county where the interested parties reside. The county sheriff serves all subpoenas of the board. The board, or any member thereof, can apply to the Circuit or Superior Court where they are sitting and force the attendance of witnesses and the production and examination of books, papers and records. The board is not bound by the usual common law or statutory rules of pleading and evidence, nor by any technical rules of practice in conducting hearings but will conduct all hearings and make all investigations in reference to the questions at issue in such manner as in its judgment are best adapted to find out and state the rights of parties.

The employee has a personal interest in the law which should prompt him to use every precaution to avoid injury. He carries his own risk the first seven days after injury, there is no pay for pain or suffering resulting from his injury, and provides in event of disability only a fraction of

his average weekly earnings over a limited period. The act puts no premium upon carelessness. Section 8 provides "No compensation shall be allowed for an injury or death due to the employee's intentionally self-inflicted injury, his intoxication, his commission of a felony, or misdemeanor, his wilful failure or refusal to use a safety appliance, his wilful failure or refusal to obey a reasonable written or printed rule of the employer which has been posted in a conspicuous place, his wilful failure or refusal to perform any statutory duty or to any other wilful misconduct on his part. The burden of proof shall be upon the defendant."

The law has been upon the statute books of Indiana long enough to make it certain that it will stay there in some form. It has been so safeguarded that its final objects, viz: To prevent accidents, or at least, to reduce those that occur to the inevitable class, and to furnish to injured employees and their dependents an absolutely prompt and certain indemnity in case of injury, are certain to be attained. No physician need hesitate to write the Industrial Board for information; the inquiry will be answered at once, courteously and with fairness.

As to how the compensation law is working in Indiana in relation to the members of the medical profession, the best obtainable record is that of the Committee on Civic and Industrial Relations of the Indiana State Medical Association. This committee has for more than four years past acted as referee in disputes between the employers, the insurance carriers, and the members of the association. This service has been an effort to adjust fees in order that appeals to the board might not prove necessary, and to adjust cases where the board has disclaimed jurisdiction. The most general feeling expressed by the physicians against the law has been directed to the insurance carriers, and to the effect that these carriers often try to cut the bills for services unreasonably. The insurance companies, on the other hand, feel that the physicians give too meager information as to the work done. As one medical advisor of an insurance company expressed it, "the physician who reports 'injured leg' and refers to his fee table in making up his bill, is unfair to the insurance companies as well as to the profession." Much ill feeling toward the rulings and notices of the Industrial Board could be avoided if the secretary, when turning down or reporting adversely upon a claim, would state briefly the reason for the action and not send a form letter stating "no jurisdiction" or some such obtuse remark. Much ill feeling toward the insurance carrier also could be avoided if the insurance carrier made some effort to find out what the physician really had done if his statement is not clear in the first instance.

The least understood and appreciated section of the law from the physician's standpoint seems

to be Section 26, reading as follows: "The pecuniary liability of the employer for medical, surgical and hospital service herein required shall be limited to such charges as prevail in the same community for similar treatment of injured persons of a like standard of living when such treatment is paid for by the injured person." This permits of a wide variance of charges over the state.

The function of the Committee on Civic and Industrial Relations of the Indiana State Medical Association has been to encourage fair prices and then to insist upon their payment. In this work the committee has found by obtaining from the complaining physician a full and complete statement of the work done and then sending this statement into a number of similar communities for opinions of practicing physicians there, omitting names, that a fair and average charge could be ascertained; that when so ascertained the insurance carrier willingly accepts and pays upon this verdict. It is more often than not just a situation where the insurance company believes the bill "padded", and where the physician thinks the insurance carrier is a "trimmer". When the bill has been fully explained the insurance company pays, for the case would be unbeatable before the board backed by such an accumulation of evidence.

The history of the handling of one case out of the number handled will serve to illustrate the work of the committee and the results it has succeeded in accomplishing.

May 5th a letter was received by the committee from a physician in practice which stated that an insurance company had turned down a charge of thirty dollars for reduction of fracture of the styloid process of the ulna. This letter of complaint was accompanied by the insurance company letter typical of its kind, as follows: "We are in receipt of your bill for services rendered the above claimant and note that you have made a charge of thirty dollars for reduction of a fracture of the styloid process of the ulna. Apparently this is a simple fracture for which a charge of ten dollars has been considered fair. However, we will consider your bill if you will reduce your charge by one-third or one-half."

May 12, a questionnaire was sent out by the chairman of the committee to eight physicians over the state asking a consensus of opinion regarding the charge, giving in this statement a detailed statement of the services rendered.

May 27, a report was ready to be forwarded the insurance company embodying these opinions, taking up the answers in detail and stating the belief that the fee as originally charged was not excessive but entirely reasonable.

June 9, an acknowledgment was received from the insurance company of the report. This revealed that more work had been done by the physician than the company realized.

June 11, a letter was received from the complaining physician stating he had been paid in full.

No case has yet been brought to the attention of the committee that could not be adjusted satisfactorily to all parties where the case was within the law. Where county associations have adopted fee schedules the task has been especially easy. Not all verdicts have upheld the physician but all have been considered fair.

The compensation law at its worst is far better than the old damage system at its best. Under the damage system recoveries for injuries were unsatisfactory and long delayed to all parties concerned, employer, employee, lawyer, physician, nurse and hospital. It is folly to assume that the premiums paid for liability insurance do not provide for fair fees for physicians; insurance is a business carried on for profit. It is the proper spirit for all parties concerned to enter into the administration of the compensation law to the end that its good results may be fully accomplished. It is not a profit destroying adventure for anyone concerned; the law passes the cost to the consumer, and we are all consumers.

FRACTURE OF THE NAVICULAR (CARPAL) BONE

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The following report, based upon the study of forty cases of fracture of the navicular bone, is made that the attention of the physician may be directed to the frequency of this injury and to its proper recognition and treatment.

Fracture of the navicular bone is not uncommon, occurring about one to ten times as compared with other fractures about the wrist joint (Speed). Its recognition and diagnosis, on the other hand, is uncommon. A simple sprain of the wrist, one without some associated bone lesion, is rare. A diagnosis of sprain, however, is common. These facts should warn the physician in making a hasty diagnosis in wrist injuries and lead him always to consider the possibility of a bone lesion and to exclude the same through x-ray study when that aid in diagnosis is possible.

The mechanism in the production of a fracture of the navicular bone may be through a direct violence, such as a blow or pressure upon the back of the wrist or it is an indirect violence of a force exerted through the palm of the hand with the wrist in the position of extension or, more rarely, inflexion. In this series there was but one case of direct violence, the hand being caught between a wall and a falling bucket. In the remaining cases the history was that of a fall upon the extended hand or that of a back-fire of an automobile (three cases). Speed, after an exhaustive study of this lesion, has come to the opinion that as the

patient falls his hand is extended so that the force is carried through the palm of the hand to the capitate bone and then through the navicular bone to the radius. If there is a marked radial flexion of the hand at this time the navicular is compressed between the capitate and the radius and a compression fracture of the navicular bone occurs. If there is less of the radial flexion the distal end of the navicular is caught in the line of force and there occurs a transverse fracture of the bone. The writer's experience showed that the compression fractures were much less common than the simple fracture. The proximal fragment of the bone may be displaced and rotated and there may also occur a dislocation of the lunate (semi-lunar) bone to the volar aspect of the wrist (four cases).

The history in this type of lesion is, as has already been stated, usually that of a fall in which the patient attempts to catch himself with the hand in an extended position, the same history which is so common in the production of a Colles fracture of the radius. In fact the association of the two fractures is not uncommon (four cases) and in all Colles fractures the carpal bones should be examined. The pain at first may not be very great and is obtained only at the extreme end of flexion and extension of the wrist. The swelling as a rule is slight at first and ecchymosis is delayed for several days. All of these points may confuse the seriousness of the lesion and support the diagnosis of a simple sprain. Upon careful examination there will be found a well-marked point of tenderness over the navicular bone and it is obtained by pressure in the anatomical "snuff box". With the hand in radial flexion tapping upon the end of the middle finger will cause pain in the wrists. The acute symptoms may disappear rather rapidly but there remains a soreness which is increased when the patient attempts to lift objects or to push with the wrist in extension. In the older cases is found a considerable limitation of motion and also an atrophy of the muscles of the forearm. This limitation of motion and pain and loss of power in the grip causes a marked impairment in the hand as a whole.

The diagnosis will depend upon a careful history and a thorough examination always bearing in mind that a sprain of the wrist is uncommon while a fracture of the carpal bone is not uncommon. The confirmation of the diagnosis is obtained by the x-ray. The ordinary technique for a radiogram of the wrist will not infrequently fail to show the fracture line as the normal curve of the bone superimposes the distal end upon the proximal end of the bone. To obtain a shadow of the entire length of the bone the tube should be focused over the proximal interphalangeal joint at the usual height and then the tube is tilted backward towards the carpal bones. This will elongate the navicular bone and bring out any

line of fracture. A lateral view of the carpal bones should be made with the ordinary position of technique in order that any displacement of the fragments or any dislocation of the other carpal bones may be noted. That this technique is most important was shown in five of the cases, the fracture having been missed in the ordinary technique films and easily seen when the special technique was used. In two cases the diagnosis was not made until several months later when the line of absorption had become so marked as to be easily seen. If the clinical evidence is strongly that of a fracture of the navicular bone the film should be read with the aid of a magnifying glass as the fracture line may be so faint that it cannot be seen by the naked eye. This occurred in three cases.

At the time of fracture there occurs but little laceration of the ligaments and therefore the hemorrhage is confined to the joint. The blood supply of the bone is derived from small terminal twigs of the radial arteries which penetrate the bone through the ligamentous attachments along the periosteum (Speed). These small capillaries are lacerated and unless they pick up their function at an early date there follows a line absorption at the fracture site and later a degenerative change in the bone. This later is followed by cavity formation and death of the bone and even later arthritic changes occur which involve the neighboring carpal bones and results in a considerable loss of function in the wrist and persistent pain and soreness.

The importance of this fracture is due to the extensive impairment which results from a failure of early diagnosis and appropriate treatment. The prognosis is in direct relation to the time treatment is begun. The length of time for a fracture to become "old" is very short, not more than two weeks after the accident and it is during this short period that an accurate and correct diagnosis must be made and correct treatment started in order that such treatment may be conservative and not operative.

In the simple and in most comminuted fractures the treatment consists in fixation of the wrist in a position of slight volar flexion and radial deviation. The splint should extend from the upper third of the forearm to the heads of the metacarpal bone or to the palm of the hand and should be used for a period of at least five weeks. During this time active motion should be maintained in the fingers. At the end of this period the splint is removed and active motion in the wrist allowed in those ranges which do not cause pain. Physiotherapy in the form of heat and gentle massage is given. There will be some pain for several weeks but if good union has occurred in the bone this pain will cease and the power of the grip will return.

If the case is seen late and fixation has not been given during the early period one will find that

absorption has occurred along the line of fracture and union cannot be expected. Carpalectomy is therefore indicated as otherwise the pain will persist, loss of function will increase and the permanent impairment will be greater. Here again the prognosis is in direct relation to the time of operation, the return of function being greater the earlier the removal of the bone is done.

The operation of carpalectomy should proceed along the careful line of technique demanded in all bone and joint operations. The hand is carefully prepared the day before and also the day of operation. The operative field is well scrubbed with soap and water, followed with alcohol and then ether and the hand and arm wrapped in a sterile towel. At time of operation the field is outlined with a weak solution of iodine. The writer uses a tourniquet as the operation in a bloodless field is done more quickly and with less trauma to the soft tissues as the structures can be easily seen and there is also less danger of infection. Three cases of paralysis have been observed following the use of a narrow tourniquet applied about the upper arm and therefore a flat (Eschmark) bandage is applied below the elbow. The line of approach is by a short longitudinal incision on the dorsum of the hand to the ulnar (inner) side of the extensor pollicis longus. In several of the cases the approach was made through the "snuff box" between the extensor tendons of the thumb but one is more apt to cut the small nerve filaments which give the sensory supply to the thumb. As dissection is carried through the soft parts care should be taken not to damage the tendon sheaths. The capsule is cut exposing the navicular bone. Blood will be found in the joint cavity. The proximal fragment is removed by carefully cutting the ligament with blunt curved scissors. The distal fragment is then removed in the same manner. The anterior ligaments will be found to be rather heavy and firm and should be cut before an attempt is made to enucleate this fragment. At all times care should be used not to damage the articulating cartilage of the other carpal bones. The capsule is then closed with a fine gut suture and the skin with a suture of dermol. A small drain of silk-worm is inserted beneath the skin and the tourniquet removed. This drain is removed at the end of forty-eight hours. If there has occurred a dislocation of the lunate bone it should also be removed. The film should always be carefully studied for this complication before operation. (Two cases of carpalectomy of the navicular have been observed in which the dislocated lunate bone has been overlooked and not removed.) A light anterior splint is used for three or four days at the end of which time active motion is begun in those ranges of motion which do not cause pain. Heat and diathermy should be used and later light massage may be given. There will be some pain for several weeks and the end

result should not be expected for several months. If the carpalectomy is done early a good range of function free of pain should be obtained. In the very late cases the limitation of motion will be greater and the pain will persist for a longer period but unless there is a very marked arthritis present eventually the wrist should be painless. If the tubercle of the bone alone is fractured fixation is necessary for only a short time.

THE EYE IN ITS RELATION TO MEDICAL DIAGNOSIS*

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In presenting this subject to such a group of highly trained specialists as compose this society I should be much embarrassed if it were not understood that I come as an internist claiming no greater skill in ophthalmology than is needed for the recognition of the more common abnormalities of the eye and depending in these as well as in the more unusual ocular manifestations of disease upon the skill of the ophthalmologist for exact diagnosis.

While much has been written concerning the importance of a close association of the internist and the ophthalmologist, there has been much neglect of the ophthalmoscope by one and lack of interest in the medical aspect by the other, and it is still too common an occurrence to see the patient whose physician should long before have sought the counsel of an expert ophthalmologist, or to receive a report from the ophthalmologist, reporting errors of refraction in detail but completely omitting any mention of vascular changes or other important findings. Each year, however, the situation improves, and the possibilities of mutual helpfulness are becoming more fully recognized.

It is of almost daily occurrence to receive a report from an ophthalmologist giving in exact detail information which may decide a troublesome problem, and as often as not with sympathetic correction of the internist's findings, or to have a request for systemic study of a patient, the cause of whose ocular lesion is obscure.

In reflecting upon the eye in its relation to internal medicine and diagnosis one is surprised that so little emphasis has been laid on this organ. From time immemorial health, beauty and character have been estimated from the eye. The trained physician receives first and best impressions from posture, respiration, color and the eye. Routine examination of lids, conjunctiva, ocular muscles, tension and pupils may quickly lead investigation into channels of correct diagnosis and to economy of time and money for the patient. For example one does not enter lightly on a diagnosis of pernicious anemia in a brown-eyed patient,

icteric scleras are observed before the abdomen of the dyspeptic patient is examined, conjunctival petechia lead one away from the lungs and to the heart of the feverish young man, long cures for rheumatism are omitted when Argyl-Robinson pupils are found, and the unconscious patient with soft eye balls is treated an hour or two earlier for diabetic coma than if this finding had not been made.

It is not surprising that the eye yields more immediate and important diagnostic aid than any other organ of the body when one reflects that besides being most often affected, either structurally or functionally by systemic disease, it is also the organ most accessible to direct and exact examination. Most all of the methods which have been developed by ophthalmologists have come to such a degree of exactness that disturbance of function can be measured within infinitely small limits, and since so many kinds of structures are found here, their condition may be taken largely as representative of identical structures elsewhere in the body. This is particularly true of the blood vessels, nerves and fluids.

As you know, of late years internists have been much concerned with methods of determining functional capacity of various organs, and great advance has been made in these studies. We have very helpful functional tests of the great organs of excretion and of digestion, and of the heart and lungs. Some are of more constant value than others, but all have a considerable variable factor in their application and are also limited in their usefulness by the normal reserve power of the organ, and by the further fact that some organs have the ability to undergo compensatory hypertrophy. I understand that the ocular physiological reserve is very limited, so that we may deal with very definite and final factors. It is of course understood that such examinations are possible only through the aid of expert ophthalmologists.

Of the many diseases in the study of which we daily turn to the ophthalmoscope, it is impossible to mention more than a few in which, excepting the brain lesions which are not to be discussed here I am most interested, and in these the actual ophthalmoscopic findings will be left to you who are so much more familiar with them than I can be.

In the present day of increasing incidence of heart disease and arteriosclerosis it is recognized by every clinician of experience that examination of the peripheral vessels which are accessible to palpation is inadequate. Rather we are concerned with the smaller vessels which are inaccessible to examination everywhere except in the retina and choroid. It has long been known, of course from Albutt's writings, that peripheral arteriosclerosis could occur with normal blood pressure, but until Moore called attention to his group of patients suffering from intra-thoracic

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aneurysm who had average blood pressure of one hundred forty-one mgm, and in whom no evidence of any considerable disease of the retinal arteries was present, no observation of this fact had appeared in the literature. Moore further stated that hypertension is the rule when retinal arteriosclerosis is present. It remained for O'Hara to publish the first exhaustive study of this question. He reported fifty cases of advanced sclerosis of the peripheral vessels as shown in the radials, brachials and temporals. In each case the systolic pressure being below one hundred forty-five. Of these the retinal vessels were practically normal in eighty-two per cent and only one showed a marked sclerosis, this being confined to a single vessel. In a second group of fifty cases with peripheral sclerosis, the systolic blood pressure varying from one hundred sixty to two hundred sixty-six, marked retinal sclerosis was present in sixty-eight per cent.

It therefore becomes apparent that there is a definite lack of relation between blood pressure and peripheral sclerosis, and equally apparent that there is marked association between hypertension and retinal sclerosis. Hypertension may exist without retinal sclerosis, but the latter finding without elevation of blood pressure of one hundred sixty or above, should always arouse grave suspicion that elevation of blood pressure had previously existed. In these cases I am accustomed to question the patient closely as to his knowledge of a pre-existing high blood pressure. The importance of this becomes apparent when one considers the problem presented by the patient with peripheral arteriosclerosis and slight evidence of heart failure, in whom it is necessary to differentiate an advancing failure in blood pressure due to a failing myocardium, from heart weakness, from some toxic cause in a patient whose blood pressure had always been low. This point is illustrated in a patient recently seen who had a cardiac enlargement with dyspnea on moderate exertion. There was a marked peripheral sclerosis, and also an anemia which might account for the dyspnea. The electrocardiogram exhibited the abnormality associated with ominous myocardial disease, and the fundus showed advanced sclerosis of the retinal vessels. Upon questioning the patient it was learned that a few months before the blood pressure had been above two hundred. The importance of these findings to prognosis is obvious.

In this connection it is well to bear in mind that the condition of the retinal arteries is in all probability duplicated in the brain, kidney and throughout the entire vascular bed. It is important to note that while authorities do not agree as to the quantitative relationship between the degree of elevation of blood pressure and retinal sclerosis, there is practically universal agreement as to the importance of the degree of retinal sclerosis,

the severity of the latter finding being in keeping with that present in the brain, heart and kidneys. Attacks of severe hemiplegia, angina, coronary occlusion and depression of renal function occur with greater frequency in the presence of moderate increase of blood pressure associated with advanced retinal sclerosis than with the higher degrees of blood pressure. The explanation for this would seem to lie in the fact that thrombosis occurs in vessels larger than those involved in hemorrhage, and in the kidney it would seem that the increased vis a tergo of high vascular tension is necessary to continued function. The clinician feels his greatest apprehension in the cases of known advanced retinal sclerosis with progressively falling blood pressure, for in these cases thrombosis is likely to involve a large vessel. Hemorrhage occurs usually from a small artery.

From these considerations it is apparent to you what great help the internist receives from the ophthalmoscope in dealing with the patient with hypertension and advanced retinal sclerosis, whose neighbor on one side has had known benign hypertension for ten years with little disability, and whose neighbor on the other side has advanced peripheral arteriosclerosis, normal retinae, normal kidney function and whose normal longevity is not affected.

The changes produced in the eye grounds by nephritis have filled a vast literature, the review of which cannot be attempted. In the experience of most men, and in my own, the fundus findings in non-hypertensive nephritis are negligible with the possible exception of edema. In a child, recently under my care, the diagnosis of acute glomerulonephritis with nephrosis was made from typical characteristics and general edema of extreme degree which was present. Papillidema and retinal edema appeared two days preceding an agonizing headache, and on the day following first appearance of headache the patient developed a temporary hemiplegia succeeded by repeated convulsions. Alternation of the hemiplegia from side to side occurred, and this was apparently directly related to the posture in which the patient lay. Recovery followed the relief of high intra-cranial pressure by repeated spinal drainage, administration of intra-venous glucose, and nitroglycerine by mouth. No marked increase of blood nitrogen occurred, and the maximum systolic blood pressure was one hundred forty. No retinal hemorrhages were seen.

In chronic nephritis the consensus of opinion is to the effect, as expressed by Altnow, that the retinitis is due either to retinal arteriosclerosis alone, or to retinal arteriosclerosis plus an added toxemia, or rather an unknown toxic factor. That this is true would appear to be indicated by the frequent coincidence of increased blood metabolites in the presence of severe retinitis. It is further indicated by the recent work in the study

of nephritis by Thomas of Chicago, who finds that a protein demonstrated as coming from the liver and other viscera and the muscles combine with the blood serum as a method of excretion through the kidney, the kidney being impermeable to normal blood serum. Since in nephritis many of the cells of the body are affected it is easy to believe that this toxic protein may affect the retina.

For a few years following the introduction of insulin therapy in diabetes, patients afflicted with this disease were brought together in medical centers in greater numbers than ever before. The opportunity for study of the various complications of diabetes was thus greatly increased. Of three hundred and seven successive diabetics studied by Spaulding and Curtis in Joslin's series, fourteen and nine-tenths per cent showed retinal arteriosclerosis, with no other changes; five and two-tenths per cent showed a retinitis with arteriosclerosis; and ten and four-tenths per cent showed cataracts. Spaulding and Curtis concluded that hypertension is a persistent finding in retinal sclerosis and with retinitis in diabetes. They believe that the retinitis found in diabetics is that of hypertensive cardio-vascular disease. "That diabetes plays but a minor role is seen by the fact that two hundred seven of the three hundred seven diabetics had normal retinæ with accompanying normal blood pressure in ninety-one per cent of the number, and normal renal function in ninety-eight per cent. Yet these cases have had diabetes of greater average duration and of no less severity than the cases with retinal changes. Every case of retinitis had retinal arteriosclerosis."—*Joslin*.

Central punctate retinitis occurred in only four instances in the six hundred seven diabetics of Wagner and Wilder, Spaulding and Curtis, and two of these also had marked hypertension and renal damage. Joslin concludes that the possibility of diabetes being a cause for retinitis is therefore remote. These findings coincide with practically all of the reports of men having large experience in diabetes, and it should be noted here that arteriosclerosis in its various forms is responsible for forty-seven per cent of the deaths in diabetics today. Joslin reports that arteriosclerosis is found at autopsy in all diabetics of five years duration, at the Deaconess hospital.

My own experience in the ocular examinations of diabetics has coincided very closely with these findings. Lypemia retinalis is said to occur infrequently. I have observed two cases in my own series, one in the pre-insulin days, the patient dying of diabetic coma. One other case was of very severe grade, which disappeared under insulin treatment, but was apparent for four or five days. The patient recovered. The soft eye balls, which are characteristic of diabetic coma, have already been mentioned, the low ocular tension is related to the content of salt and sugar in the ocular fluids.

Of all the ocular affections related to systemic disease none have greater interest to the internist than those arising as a result of the focal infections. A vast literature has grown up about this subject, and notable papers have been presented to you by your own members. We look to the ophthalmologist for the preliminary diagnosis of these lesions since the public has become trained to report to the specialist directly for disturbances of the eye. A small percentage appears in the routine, general examinations, or as a complication arising in the course of infectious disease. These latter are always referred to the ophthalmologist since accurate diagnosis is essential to successful management. In the earlier period of recognition of the etiologic relation of focal disease to ocular affections, investigation was limited almost entirely to the region of the head, especially to the tonsils and teeth. It would seem that etiologic diagnosis here would be simple and successful treatment assured. However, this is not always true, since it must be acknowledged that dental infections may constitute only a small part of the total infection, and too often while thinking of dental infection only in terms of devitalized teeth, with apical granulomata, we forget that infection may be present about vital teeth. We are at times further handicapped both by the reluctance of the patient to lose his teeth and by the natural conservatism of the dentist, who while perfectly willing to sacrifice his patient's teeth if assured beyond doubt that they are causing the eye trouble, objects to doing so if we are in any doubt whatever. The tonsils fortunately no longer trouble us in this way since we almost always have the intelligent cooperation of the laryngologist.

It does not always follow of course that the removal of the original causative focus brings about cure, since the delicate structures of the eye having been once invaded by the virulent strains of bacteria, particularly the streptococci and gonococci, are more susceptible to those less active. This is a sort of clinical symbiosis, and the same phenomenon aids in explaining the behavior of the joints in certain cases.

The frequency with which infection of the accessory nasal sinuses appears as a cause of eye affections is now generally recognized. It is stated by some writers that there is no definite relation between the site of the causative infection and the type of ocular disease, but, as pointed out by Larkin, "each sinus seems to have a fairly well established adherence to certain of these complications", and he quotes Weiner in classification of the types of ocular disease associated with the several sinuses. In these cases certainly the ophthalmologist and laryngologist are self-sufficient and need no help from the internist.

There remains a group, however, that does not get well even after thorough and expert care directed to these foci, and these latter cases tax the

patience and resourcefulness of the internist to the utmost. There are certain helps to be had from experience and from a knowledge of the clinical behavior of types of infection which lead one logically in the further search. With the detection of infection in the head it becomes quite natural to examine other organs which have become secondarily infected from them. This applies especially to metastatic invasions of the gall bladder, renal pelvis, and appendix, which may be acting as new and more efficient foci, and I have more than once observed recurring iritis or corneal ulceration which having at first subsided, following extraction of teeth, only become cured by a cholecystectomy.

It is of great interest that in this country at least there no longer exists any doubt in the minds of ophthalmologists as to the actual etiologic relationship of focal infection to certain ocular diseases. This has been brought about by the cooperative studies of ophthalmologist and internist, a classic example of which is the work of Irons and Brown in the study of the recurrence of iritis as influenced by the removal of infections. This work extended over a period of ten years and included the analysis of two series of one hundred cases each, with a final summary of fifty cases in which freedom from attacks over a long period of years in patients who had had previous attacks of iritis furnished ample evidence of the value of treatment based on infectious etiology. The literature now abounds in examples of this kind and is familiar to you all.

The burden and responsibility resting upon the internist in searching for foci of infection is a very great one. The problem presented is often confusing, due to the multiplicity of infections present. Here the recognition of the type of infection by cultural peculiarities is of value and blood cultures may be employed to advantage. Careful, clinical history and physical examination should begin with the teeth, tonsils and accessory spaces and should proceed through the body. The lungs may give evidence of early tuberculosis or chronic tuberculosis with secondary pyogenic infection. Bronchiectasis and chronic empyema may easily be overlooked. Subacute bacterial endocarditis frequently is responsible for embolic events. Infections, clinically silent, are frequent in the gall bladder, renal pelvis, and appendix and frequently demand all the resourcefulness of the internist for their detection. The colon in certain cases may require the most patient, clinical and bacteriologic analysis. Ulcerative colitis especially is important. Infection of the prostate gland may be a source of invasion. The infection here is more often non-gonococcal than gonococcal. In women tubal infections and chronic infections of Bartholin's glands may produce no local complaint, while causing systemic invasion. This is also true of chronic infections of the uterine cervix.

While such elaborate study is not always necessary for the demonstration of the causative agent, yet such care often brings about improvement in general health, and this is of especial value in the treatment of those infections which are less amenable to local management, especially the sinuses and prostate. It is quite true that all this implies a formidable programme, yet it is no more extensive than that involved in the treatment of many cardiac, renal and arthritic patients. Certainly one should be no more reluctant to undertake an exploratory abdominal operation for the saving of vision than for the restoration of other body functions.

In a brief consideration of the eye in its relation to general medicine it is impossible to attempt even to mention most of its important aspects. No other organ is representative of such a variety of tissues or has so much to do with the mental and economic existence. The attempt has been made to discuss a few of the conditions that are illustrative of the relationship of the eye to the systemic health. In the study and understanding of these conditions it is made evident that the ophthalmologist has been one of the important influences in directing the trend of modern medicine, and it is this trend which in its teaching insists more and more upon that broadest conception, the body mechanism as a whole.

A NEW BONE PEG AND METHOD OF USE

H. R. ALLEN, M.D.

INDIANAPOLIS

Since there are good men who know exactly and precisely why bone pegs should or should not be used in fractures of long bones, we may leave the arguments safely in their hands and proceed to describe a peg and method about which they have not heard.

This peg has had a successful workout for several years and is now making its first appearance in print.

By devising a different peg and method of using it before operating the operation is reduced to its simplest and most efficient form. Half of the length of any bone peg is left smooth and polished, but the other half is threaded like a screw or it may have sharp, closely approximated, shallow grooves turned out of its surface. In no other way does this bone peg differ from those in general use. (See Figure No. 1.)

The application of the peg is shown in Figure No. 2. An incision is made over one of the broken ends of bone, just large enough or rather just small enough to permit the broken end to protrude. This broken end has a "V" shaped notch cut out of its margin as shown in the illustration, then the canal is bored or reamed out as far as the peg is long. The peg is now inserted so far that

only two or three of the turned grooves can be seen in the notch of the "V" shaped, marginal opening. This portion of the broken bone containing the peg is replaced in the wound and the other end is brought out through the small incision and its canal is bored out to a depth of only half the length of the peg, and then it is returned back into the wound.

The fracture is now accurately reduced. The "Fracture Reducer" shown in Figure 3-A is a great help at times but is not always essential.

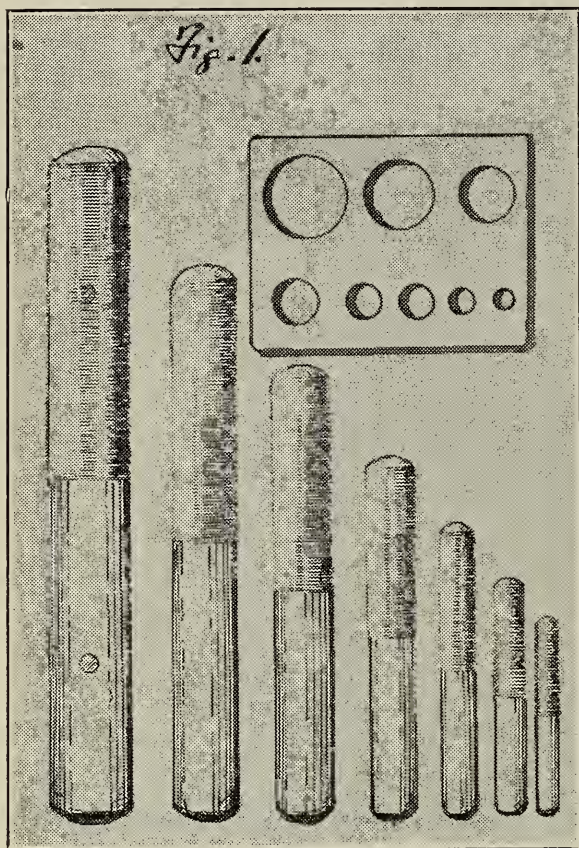


Fig. 1

The bone pegs have grooves turned or threaded for half of their length. The largest peg is made of two pieces which are sterilized at operation and pinned together. The metal die aids in selecting the correct diameter of peg for each drill.

When the broken ends are accurately placed the sharp pointed instrument, shown in Figure 3-B, engages with the grooves and works the peg into the empty bone canal.

When the point finds no more grooves to engage with you have the satisfaction of knowing that half of the peg is on duty in each of the broken fragments, and closure of the wound ends the operation.

As each surgeon has more or less fixed ideas about antiseptics it would be unnecessary for me to suggest killing the germs before they get into the wounds by keeping the wounds flooded with antiseptics. As I prefer wet bichloride of mercury gloves to rubber gloves in bone work I again expose a thought.

As splints are selected by habit or by appearance or by convenience it might be considered superfluous to say nothing about their actual mechanical qualities.

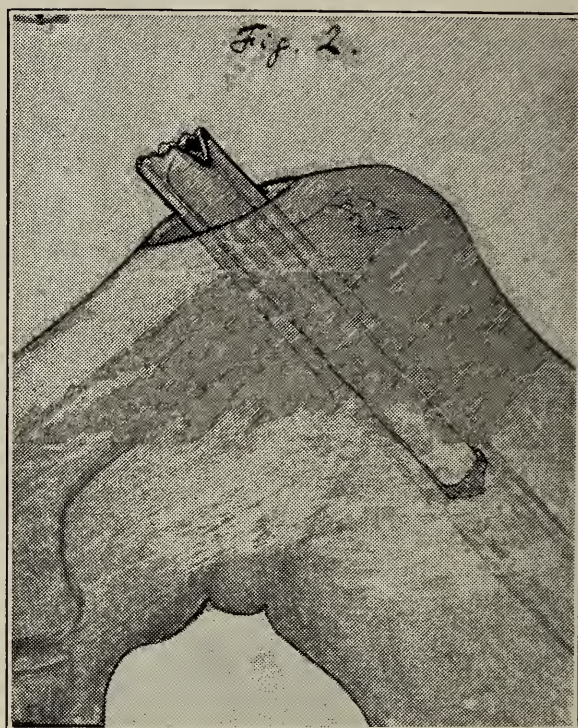


FIGURE 2

Represents upper fragment of femur protruding through small incision and exposing two or three grooves of the peg through the "V" shaped opening in the margin of the fracture. The peg is inside the canal of the broken femur.

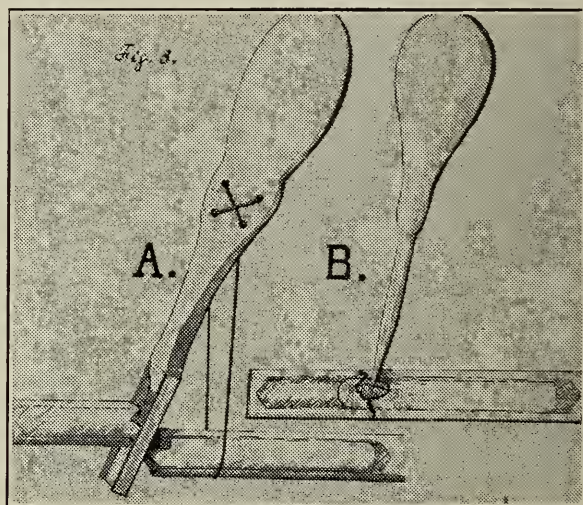


FIGURE 3-A

Shows the reduction lever with the soft steel wire that prevents slipping while the fragments are brought into alignment. After proper alignment is secured the wire is cut, the lever is withdrawn and the broken ends seat themselves in their proper places.

FIGURE 3-B

The pointed tool is seen working the peg into the canal of the distal fragment.

The claims accompanying this peg and method are becomingly modest, involving such items as small incisions, simplicity, brevity and reasonable success without much irritation to the established ideas suffering modern endorsement.

GETTING SOMEWHERE

"'Cheshire-Puss,' she began rather timidly, as she did not at all know whether it would like the name; however, it only grinned a little wider. 'Come, it's pleased so far,' thought Alice, and she went on. 'Would you tell me, please, which way I ought to go from here?'"

"'That depends a good deal on where you want to get to', said the Cat.

"'I don't much care where—,' said Alice.

"'Then it doesn't matter which way you go,' said the Cat.

"' so long as I get somewhere,' Alice added as an explanation.

"'Oh, you're sure to do that,' said the Cat, 'if you only walk long enough.' Alice felt that this could not be denied . . ."

—Alice's Adventures in Wonderland.

Could Lewis Carroll have been thinking of the medical profession in this year A. D. 1928 when he wrote the above conversation between Alice and the Cheshire cat? Have we not been asking which way we ought to go; and could anyone give a better answer than that of the Cheshire cat that we are sure to get *somewhere*, if we only walk long enough? For if ever there were a group, bewildered and befuddled—totally unaware of where they stand, not knowing in which direction to turn and what destination to seek, that group is our own medical profession. It presents the unpromising picture of a body in which every cell or group of cells is aimlessly groping in a different direction. It is spineless, it is timid, it is afraid of its own shadow. Betrayed by those it holds to be its friends, in many instances by its own members, it will not stand up for its own independence which means so much to its life and progress and to the community which it serves. It quakes at the possible charge of selfishness, acquisitiveness, or inhumanity by those who are playing the part of parasite on the medical host. Cozening words and cloying description—unselfishness, devotion to the afflicted poor, guardian of the lives of the little children—these are the soporifics used by a group of practical men and women to lull the profession into that unconsciousness which permits them to use it to their own advantage, though they destroy the agent of their apparent benevolence. They have found the goose that lays the golden egg; but they have forgotten the fate of the goose as narrated by Aesop. They have discovered a pot of gold at the end of the rainbow—quite true, not THE pot of gold, because it is not yet possible to obtain expensive clothes, luxurious homes and automobiles, foods to suit wildest fancy, nor even the blessings of Social Service without footing the bill—but it is now quite possible for one to obtain the type of medical attention which only extreme wealth can command, by the payment of a modest fee—just enough to pay for the medicine, and the stenographer who registers the patient, and the social service department which determines that he cannot pay a doctor.

This subject is not a new one. It is uppermost in the mind of almost every practicing physician. It is brought to the front most forcibly in the October, 1928, *Bulletin of the American Medical Association*, in which is reprinted two addresses, one by a professional social worker, E. H. Lewinski-Corwin, the other by a physician, Dr. L. L. Bigelow. It is brightly illumined by the discussion in which the plea of Dr. Bigelow for a cessation of the movement which is destroying the self-respect of a large part of the population and which can only result in the degradation of the medical profession and destroying it as a virile, independent body, is met by the charge from professional job holders that the doctor is "acquisitive" and the intimation, with some degree of heat, that free medical attention is the right of any person who, at the time of his illness, feels that he cannot afford to pay; and the doctor is not to concern himself with determining who can or cannot pay. He is on the scene to deliver his free ministrations and other matters do not concern him. The readiness and confidence with which those who feed at the trough of public charity are prepared to berate the doctor, and their smug complacency withal, the readiness with which they question his motives and minimize his contributions, bodes ill for a profession which is unwilling or too slothful to arise and smite its destroyers. The medical profession stands in no need of defense, neither of its motives nor its acts. To quote Dr. Bigelow: "To the needs of this class (the poor) who would suffer or perish but for the ministration of the physician, the medical profession gives now, as it always has done, its services freely and gladly. * * * What we do object to, or should object to, is the exploitation of this charitable instinct by those self-appointed, *soi-disant* harbingers of the millennium, whose eloquence taps the strong box of the wealthy philanthropist for the money to erect on this charitable instinct of the doctor the huge structure that is well financed in all its other working parts."

The argument is frequently put forward that in the clinic, the physician receives experience and prestige which are of definite value to him. It is not denying the truth of this assertion to point out that both the experience and the prestige can be amply derived from the treatment of the indigent alone, without the necessity for high pressure campaigns by professional "drive" managers, for ever increasing funds with which to corral into the clinic those who should, and ordinarily would, pay the physician his legitimate fee. Moreover, we can with justice question the judgment of the professional social worker as to the ability of some of the so-called indigent patients to pay. When one realizes that it is the thesis of the professional dispenser of charity that a mature physician, with his knowledge of men and women, with his insight

into human illness and human weakness, with his intimate understanding of all the patient's problems, is incompetent to determine who is able to pay his fee and how large a fee can be paid; but that a young social worker, inexperienced save in class room discussions and textbook problems, with no real or well-grounded knowledge of the things that motivate men and women is the only type of person who is competent to make such a decision, the ridiculous situation is exposed in its fundamental absurdity. If a man who earns, let us say twenty-five dollars a week and who supports a wife and child, should rip his coat beyond repair, he cannot go to a clothier and get a new one free. He may not have sufficient money to buy a new coat at the time, but if he is to get another one, he must either borrow enough money to buy it, or arrange to pay for it in the future. Should a hail storm break all the windows of his home, he cannot go to a glazier's "free clinic" and obtain new glass and a workman to set it in place without money. He must either borrow the money to pay for it, or arrange to pay for it in the future. And for such misfortunes, although like illness they are not anticipated and may or may not interfere temporarily with his earning capacity, he is ready to expend money. But when illness comes, the physician is expected to furnish his services without pay to the same individual. He has gradually come to feel that the expert and conscientious services of the physician are his natural right, and this attitude has been fostered in him by the professional social worker and the philanthropic organizations. Everybody must be paid but the doctor. He can be victimized because he is too stupid, or too indolent, or too timid, to assert his rights, or else too bewildered to recognize them. He is afraid of being charged with "acquisitiveness" and commercialism if he mentions the matter of being paid for his services.

There is another group of activities that vitally concern the physician, and that is the field of the Department of Public Health. This problem is not that of who can or cannot pay, because in conserving the health of the community, this line cannot properly be drawn. The public has a right to demand that every measure deemed necessary to protect and conserve its health, such as the prevention of epidemic disease, must be carried out regardless of how its administration affects any particular group. The diagnosis and isolation of smallpox in the person of wealth are just as necessary to the welfare of the community as are its diagnosis and isolation in the slums. But it should never be forgotten that preventive medicine is part of a municipality's program, exactly as are police and fire protection and other public works; and it is in no sense more reasonable that the physician contribute his services free or practically so, than that the police department and the

fire department be manned by philanthropic policemen and firemen—or indeed than that the commissioner of public health, his subordinates and his nurses contribute their services on the same philanthropic basis. This has nothing at all to do with charity. This is remunerative work, exactly as is any other municipal activity. And when the Board of Health decrees that it will pay only three dollars to a physician, and generally only one with special training, for seeing twenty to fifty patients, as is frequently the case in infant welfare and prenatal clinics, it is not unreasonable to say that the physician is being victimized by those for whose very existence his profession stands responsible. The excuse which is readily forthcoming that hundreds of physicians hold themselves in such light esteem as to clamor for these positions is the same excuse offered by the unscrupulous employer, the owner of the sweat shop, the exploiter of labor. That the workman is worthy of his hire is no less true today than it was in Biblical times.

The explanation of the widespread exploitation of the physician is quite apparent. His exploiters are well organized and work in concert towards a goal which they understand and which they aim to reach. The physician, although he has the machinery for his own welfare and protection assembled, never supplies the power to set it in motion. Moreover, he has not the courage to put an end to his own practices which are steadily undermining him. When doctors lack the self-respect to decline Board of Health clinics for which they are shamefully underpaid, when they lack the courage and self-respect to take a definite stand against rendering services gratuitously for which they have every right to expect to be paid, when they are struck with palsy at the thought of asserting ordinary rights which any other person or group in the entire community demands and quite properly assumes as naturally his own, when the dread of the charge of commercialism, though they know the charge is unjustified, renders them inarticulate, they can properly be charged with inviting their own ultimate destruction. It would be a sorry day, if that day arrived when the physician practiced for the financial reward and not for real love of his profession. But it so happens that the practice of his chosen life work demands every moment of his life, so that in order to clothe and feed and house himself and family and properly raise and educate his children, he must derive a decent income from his labor of love. There can be no gainsaying this, and no physician need be ashamed to demand it as his natural right. And he need never fear enlightened public opinion in taking vigorous measures to see that he gets it; though denunciation of the professional benefactor who is willing to go the limit in contributing *other* peoples' money. time

and efforts, be necessary to carry his point. For an intelligent public can readily see that an independent, active, satisfied medical profession, which will ever be attractive to the men of active mind and high ideals of each succeeding generation, can only contribute to the common weal. The profession can rest assured that an educated public which has always cooperated to the best of its ability in helping the medical group raise its own standards, will actively cooperate in cutting short any movement which will result in lower standards and poorer medical attention to the community. But the intelligent leaders of the community can do nothing unless the medical profession awakes from its lethargy and constantly and vigorously presents its case to them.

The officers of the Wayne County Medical Society stand ready to do all in their power to carry out this vital program. But without the active interest and cooperation of the entire membership of the society, their work goes for naught and their efforts are wasted. In such a program, the entire profession must work harmoniously and with a single purpose; and to do this means that the entire membership must attend the meetings, criticise, shape and sponsor a definite policy, which means entering into vigorous discussion, airing our differences and clarifying our aims. If the members of our profession do not cease their fruitless grumbling in favor of concerted action, they may, like Alice in Wonderland, agree with the Cheshire cat that if you walk long enough you are sure to get somewhere, but that that "somewhere" will be a far different and far inferior status for the Aesculapian cult.—A. J. H. in the *Bulletin of the Wayne County (Michigan) Medical Society*, November 13, 1928.

SPECIAL ARTICLES

THE STATE LABORATORY

OPINION OF ATTORNEY-GENERAL AS TO WHETHER LAW IS MANDATORY COMPELLING LABORATORY OF STATE BOARD OF HEALTH TO SUPPLY REPORTS OF BLOOD EXAMINATIONS IN CASES WHERE PHYSICIAN DOES NOT REPORT PATIENT INDIGENT

At the first meeting of the House of Delegates of the Indiana State Medical Association at the Gary session, September, 1928, John M. Pulliam, M.D., of Fort Wayne, delegate from Allen county, introduced a resolution condemning certain phases of work being carried on by the state laboratory of the Indiana State Board of Health. This resolution was referred by the chair to the Reference Committee on Public Policy and Legislation. The Reference Committee on Public Policy and Legislation, in its report upon the Pulliam resolution at the second meeting of the House of Delegates, recommended the approval

of the resolution. Following a long discussion on the floor of the House, this resolution was referred to the Standing Committee on Public Policy and Legislation "with instructions to get in contact with the State Board of Health and work the problem out before the next session." The action of the House of Delegates gave the Standing Committee on Public Policy and Legislation the power to act.

Following the instructions of the House of Delegates, Wm. F. King, M.D., secretary of the State Board of Health, and John M. Pulliam, M.D., were invited to attend a meeting of the Legislative Committee to which Dr. F. W. Cregor, former chairman of the legislative committee, and Dr. W. N. Wishard, chairman of the Bureau of Publicity Committee, were also invited and which meeting was held at the headquarters office of the Association, 804 Hume-Mansur Building, Indianapolis, on November 30, 1928. Present at this meeting were: John H. Hewitt, M.D., chairman, and O. T. Scamahorn, M.D., member of the State Legislative Committee; George R. Daniels, M.D., president of the Indiana State Medical Association; Frank W. Cregor, M.D.; Wm. N. Wishard, M.D.; Wm. F. King, M.D., secretary of the State Board of Health; John M. Pulliam, M.D.; Albert Stump, attorney for the Indiana State Medical Association, and Thomas A. Hendricks, executive secretary.

A copy of the original resolution was given to each member of the committee who attended the meeting. Dr. Pulliam spoke in regard to the resolution. Dr. King answered the charges. It was agreed that Dr. King should ask the attorney-general for an opinion as to whether the state laboratory had the right to examine Wassermanns in indigent cases and not make examinations for persons who were able to pay. Dr. King agreed to submit the question that was to be asked the attorney-general to Dr. Wishard for review before presenting the question to the attorney-general. As agreed, Dr. King presented the question to Dr. Wishard. The part of Dr. Wishard's letter relating to the interrogatory to be submitted to the attorney-general is as follows:

"December 21, 1928.

"Dr. Wm. F. King,
"Secretary, State Board of Health,
"Indianapolis, Indiana.

"My Dear Doctor King:
"I have your proposed letter to the Hon. Arthur L. Gilliom, Attorney General of Indiana. I think well of it, but it does not seem to me to cover the point in full which I endeavored to present at the recent committee meeting at the office of the Indiana State Medical Association. I would suggest that you add to the last paragraph the following:

"Is the law mandatory as to furnishing laboratory reports of blood examinations for syphilis for people who are amply able to pay and who could get the same service from private laboratories if they paid for it? Also to what extent is the State Board of Health required to make free examinations

in cases of venereal diseases or otherwise where patients are able to pay and can obtain the same services through private laboratories?

"If you propose to send this written inquiry to the Attorney General by mail will you kindly send me a copy of the final draft? If you anticipate presenting the written inquiry in person, and supplement the inquiry with an oral statement, I will be glad to accompany you, together with the chairman of the Committee on Public Policy and Legislation of the Indiana State Medical Association, and to have an opportunity to present the matter in a statement embodying the views of the Association.

"With kind regards,

"Sincerely yours,

WM. M. WISHARD.

"P. S.—If you think well of mailing your inquiry without conference with the Attorney General such a course would be very satisfactory indeed."

In compliance with Dr. Wishard's request the additional paragraph was added to the question put to the attorney-general, and Dr. King presented the matter to the attorney-general along with the accompanying letter for his (attorney-general's) opinion:

"I am enclosing herewith a question in reference to the work of the laboratory of the State Board of Health upon which I would like an official opinion. By way of explanation, let me say that this question has come up because the State Board of Health Laboratory makes examinations of specimens sent in by physicians as well as specimens coming from state institutions, and makes reports to physicians and institutions on the laboratory findings without regard to the financial status of the person whose specimen is thus submitted. It is claimed by some that the Laboratory should make examinations only for persons who are indigent and who are unable to pay for a private laboratory service. The indigency in this case would be determined by the physician sending in the specimen and thus the laboratory should refuse to make an examination except in cases where the physician stated that the patient is indigent. In other words, the question is, 'Is the law mandatory upon the State Board of Health Laboratory to furnish reports of blood examinations for syphilis to physicians in cases where the physician does not report that the patient is indigent?' It must be borne in mind that syphilis is a communicable disease and a menace to public health.

"I will appreciate your opinion at your earliest convenience."

The attorney-general's opinion follows:

"I have your request for my opinion on the following question:

"I am requested to give an official opinion as to whether the state laboratory of hygiene, which is a department of the state board of health, must accept specimens of blood from physicians, health officers and clinics for laboratory examination for syphilis without regard to the economic status of the individual or the ability of the individual to pay for medical service and private laboratory service, or can the laboratory of hygiene refuse its laboratory service except where it is shown to the laboratory that the individual is unable to pay for medical service and private laboratory service and is therefore reported to the laboratory as being indigent and is recorded in the laboratory records as an indigent person. In other words, has the state board of health, under the provisions of the law referred to, the right to determine that the services of the laboratory, in making pathological examinations to aid in the enforcement of the health laws and for the public benefit, shall be limited to those citizens reported as being indigent?"

"More specifically, you say that the question is:

"Is the law mandatory upon the state board of health laboratory to furnish reports of blood examinations for syphilis to physicians in cases where the physician does not report that the patient is indigent?"

"The legislature provided for the establishment of the laboratory in question in an act of 1905 and defined its purpose only in general terms as follows (Section 8143, Burns' 1926):

"The state laboratory of hygiene shall be at Indianapolis and shall be used for making analysis of foods and drugs for the purpose of enforcing the pure food and drug laws, for making sanitary analyses, pathological examinations and studies in hygiene and preventive medicine to aid in the enforcement of the health laws, and for no other purpose. All work done in the state laboratory of hygiene shall be done exclusively and entirely for the public benefit, and no fees shall be charged."

"The legislature has not specified in what cases and under what conditions pathological examinations shall be made. It placed the laboratory under the general control of the state board of health. This means that the laboratory should be conducted and administered in such a manner as to carry out the purpose of its creation as stated in said section 8143. The board necessarily must exercise discretion in conducting the laboratory so as to have it perform the function defined by the legislature. In the exercise of that discretion the board may make reasonable rules which are calculated to reach the ends sought to be accomplished by such laboratory.

"In my opinion it is a reasonable rule to confine pathological examination to cases of the indigent in respect of the disease of syphilis. The statute does not make it mandatory to make examinations for the benefit of any private persons, but contemplates only the making of such examinations as may be necessary for the public benefit. It is not mandatory that examinations be made on request whether for the indigent or for those able to pay for examinations.

"The apparent intention of the legislature was that such examinations should be made as the board may deem necessary to enable the people to protect the public health against the ravages of diseases. In cases of new diseases or in cases of epidemics it would be the legislative intention that this laboratory should be used in making examinations relating to stricken individuals sufficient unto the purpose of gaining such knowledge as would be helpful to protect the public health, and such examinations ought in such situations not be confined to indigent sufferers if the public interest would require that examinations should also be made of some who are able to pay.

"The purpose of the act is not to provide charity to the indigent. Its purpose is to protect and promote the public health, and the laboratory in question should be conducted with that end in view. If that end can be attained by making examinations only in cases of the indigent, no one can complain, but if to accomplish that end examinations ought also be made in cases of those able to pay, then the matter of ability to pay should be disregarded."

THE CODE OF ETHICS

We have had so much to say in *THE JOURNAL* concerning unprofessional conduct that several of our correspondents have reminded us that they never were taught anything about the principles of medical ethics while in medical school, and that but little has been said concerning the matter since entering practice. They have asked where they may obtain copies of the *Principles of Medical*

Ethics, and we have answered to the effect that copies may be obtained by addressing the American Medical Association, 535 North Dearborn Street, Chicago. However, fearing that those who most need the wise counsel of the Principles of Medical Ethics will not take the trouble to write for such pamphlets, we have decided to publish the Principles of Medical Ethics, and they are as follows:

PRINCIPLES OF MEDICAL ETHICS OF THE AMERICAN MEDICAL ASSOCIATION

CHAPTER I

THE DUTIES OF PHYSICIANS TO THEIR PATIENTS

THE PHYSICIAN'S RESPONSIBILITY

SECTION 1.—A profession has for its prime object the service it can render to humanity; reward or financial gain should be a subordinate consideration. The practice of medicine is a profession. In choosing this profession an individual assumes an obligation to conduct himself in accord with its ideals.

PATIENCE, DELICACY AND SECRECY

SEC. 2.—Patience and delicacy should characterize all the acts of a physician. The confidences concerning individual or domestic life entrusted by a patient to a physician and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed except when imperatively required by the laws of the state. There are occasions, however, when a physician must determine whether or not his duty to society requires him to take definite action to protect a healthy individual from becoming infected, because the physician has knowledge, obtained through the confidences entrusted to him as a physician, of a communicable disease to which the healthy individual is about to be exposed. In such a case, the physician should act as he would desire another to act toward one of his own family under like circumstances. Before he determines his course, the physician should know the civil law of his commonwealth concerning privileged communications.

PROGNOSIS

SEC. 3.—A physician should give timely notice of dangerous manifestations of the disease to the friends of the patient. He should neither exaggerate nor minimize the gravity of the patient's condition. He should assure himself that the patient or his friends have such knowledge of the patient's condition as will serve the best interests of the patient and the family.

PATIENTS MUST NOT BE NEGLECTED

SEC. 4.—A physician is free to choose whom he will serve. He should, however, always respond to any request for his assistance in an emergency or whenever temperate public opinion expects the service. Once having undertaken a case, a physician should not abandon or neglect the patient because the disease is deemed incurable; nor should he withdraw from the case for any reason until a sufficient notice of a desire to be released has been given the patient or his friends to make it possible for them to secure another medical attendant.

CHAPTER II

THE DUTIES OF PHYSICIANS TO EACH OTHER AND TO THE PROFESSION AT LARGE

ARTICLE I.—DUTIES TO THE PROFESSION

UPHOLD HONOR OF PROFESSION

SECTION 1.—The obligation assumed on entering the profession requires the physician to comport himself as

a gentleman and demands that he use every honorable means to uphold the dignity and honor of his vocation, to exalt its standards and to extend its sphere of usefulness. A physician should not base his practice on an exclusive dogma or sectarian system, for "sects are implacable despots; to accept their thralldom is to take away all liberty from one's action and thought." (Nicon, father of Galen.)

MEDICAL SOCIETIES

SEC. 2.—In order that the dignity and honor of the medical profession may be upheld, its standards exalted, its sphere of usefulness extended, and the advancement of medical science promoted, a physician should associate himself with medical societies and contribute his time, energy and means in order that these societies may represent the ideals of the profession.

DEPORTMENT

SEC. 3.—A physician should be "an upright man, instructed in the art of healing." Consequently, he must keep himself pure in character and conform to a high standard of morals, and must be diligent and conscientious in his studies. "He should also be modest, sober, patient, prompt to do his whole duty without anxiety; pious without going so far as superstition, conducting himself with propriety in his profession and in all the actions of his life." (Hippocrates.)

ADVERTISING

SEC. 4.—Solicitation of patients by physicians as individuals, or collectively in groups by whatsoever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical institutions from a legitimate advertisement of location, physical surroundings and special class—if any—of patients accommodated. It is equally unprofessional to procure patients by indirection through solicitors or agents of any kind, or by indirect advertisement, or by furnishing or inspiring newspaper or magazine comments concerning cases in which the physician has been or is concerned. All other like self-laudations defy the traditions and lower the tone of any profession and so are intolerable. The most worthy and effective advertisement possible, even for a young physician, and especially with his brother physicians, is the establishment of a well-merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct. The publication or circulation of ordinary simple business cards, being a matter of personal taste or local custom, and sometimes of convenience, is not *per se* improper. As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards.

It is unprofessional to promise radical cures; to boast of cures and secret methods of treatment or remedies; to exhibit certificates of skill or of success in the treatment of diseases; or to employ any methods to gain the attention of the public for the purpose of obtaining patients.

PATENTS AND PERQUISITES

SEC. 5.—It is unprofessional to receive remuneration from patents for surgical instruments or medicines; to accept rebates on prescriptions or surgical appliances, or perquisites from attendants who aid in the care of patients.

MEDICAL LAWS—SECRET REMEDIES

SEC. 6.—It is unprofessional for a physician to assist unqualified persons to evade legal restrictions governing the practice of medicine; it is equally unethical to prescribe or dispense secret medicines or other secret remedial agents, or manufacture or promote their use in any way.

SAFEGUARDING THE PROFESSION

SEC. 7.—Physicians should expose without fear or favor, before the proper medical or legal tribunals, corrupt or dishonest conduct of members of the profession. All questions affecting the professional reputation or

standing of a member or members of the medical profession should be considered only before proper medical tribunals in executive sessions or by special or duly appointed committees on ethical relations. Every physician should aid in safeguarding the profession against the admission to its ranks of those who are unfit or unqualified because deficient either in moral character or education.

ARTICLE II.—PROFESSIONAL SERVICES OF PHYSICIANS TO EACH OTHER

PHYSICIANS DEPENDENT ON EACH OTHER

SECTION 1.—Experience teaches that it is unwise for a physician to treat members of his own family or himself. Consequently, a physician should always cheerfully and gratuitously respond with his professional services to the call of any physician practicing in his vicinity, or of the immediate family dependents of physicians.

COMPENSATION FOR EXPENSES

SEC. 2.—When a physician from a distance is called on to advise another physician or one of his family dependents, and the physician to whom the service is rendered is in easy financial circumstances, a compensation that will at least meet the traveling expenses of the visiting physician should be proffered. When such a service requires an absence from the accustomed field of professional work of the visitor that might reasonably be expected to entail a pecuniary loss, such loss should, in part at least, be provided for in the compensation offered.

ONE PHYSICIAN TO TAKE CHARGE

SEC. 3.—When a physician or a member of his dependent family is seriously ill, he or his family should select a physician from among his neighboring colleagues to take charge of the case. Other physicians may be associated in the care of the patient as consultants.

ARTICLE III.—DUTIES OF PHYSICIAN IN CONSULTATIONS

CONSULTATIONS SHOULD BE ENCOURAGED

SECTION 1.—In serious illness, especially in doubtful or difficult conditions, the physician should request consultations.

CONSULTATION FOR PATIENT'S BENEFIT

SEC. 2.—In every consultation, the benefit to be derived by the patient is of first importance. All the physicians interested in the case should be frank and candid with the patient and his family. There never is occasion for insincerity, rivalry or envy and these should never be permitted between consultants.

PUNCTUALITY

SEC. 3.—It is the duty of a physician, particularly in the instance of a consultation, to be punctual in attendance. When, however, the consultant or the physician in charge is unavoidably delayed, the one who first arrives should wait for the other for a reasonable time, after which the consultation should be considered postponed. When the consultant has come from a distance, or when for any reason it will be difficult to meet the physician in charge at another time, or if the case is urgent, or if it be the desire of the patient, he may examine the patient and mail his written opinion, or see that it is delivered under seal, to the physician in charge. Under these conditions, the consultant's conduct must be especially tactful; he must remember that he is framing an opinion without the aid of the physician who has observed the course of the disease.

PATIENT REFERRED TO SPECIALIST

SEC. 4.—When a patient is sent to one specially skilled in the care of the condition from which he is thought to be suffering, and for any reason it is impracticable for the physician in charge of the case to accompany the patient, the physician in charge should send to the consultant by mail, or in the care of the patient under seal, a history of the case, together with the physician's opinion and an outline of the treatment, or

so much of this as may possibly be of service to the consultant; and as soon as possible after the case has been seen and studied, the consultant should address the physician in charge and advise him of the results of the consultant's investigation of the case. Both these opinions are confidential and must be so regarded by the consultant and by the physician in charge.

DISCUSSIONS IN CONSULTATION

SEC. 5.—After the physicians called in consultation have completed their investigations of the case, they should meet by themselves to discuss conditions and determine the course to be followed in the treatment of the patient. No statement or discussion of the case should take place before the patient or friends, except in the presence of all the physicians attending or by their common consent; and no opinions or prognostications should be delivered as a result of the deliberations of the consultants, which have not been concurred in by the consultants at their conference.

ATTENDING PHYSICIAN RESPONSIBLE

SEC. 6.—The physician in attendance is in charge of the case and is responsible for the treatment of the patient. Consequently, he may prescribe for the patient at any time and is privileged to vary the mode of treatment outlined and agreed on at a consultation whenever, in his opinion, such a change is warranted. However, at the next consultation, he should state his reasons for departing from the course decided on at the previous conference. When an emergency occurs during the absence of the attending physician, a consultant may provide for the emergency and the subsequent care of the patient until the arrival of the physician in charge, but should do no more than this without the consent of the physician in charge.

CONFLICT OF OPINION

SEC. 7.—Should the attending physician and the consultant find it impossible to agree in their view of a case another consultant should be called to the conference or the first consultant should withdraw. However, since the consultant was employed by the patient in order that his opinion might be obtained, he should be permitted to state the result of his study of the case to the patient, or his next friend, in the presence of the physician in charge.

CONSULTANT AND ATTENDANT

SEC. 8.—When a physician has attended a case as a consultant, he should not become the attendant of the patient during that illness except with the consent of the physician who was in charge at the time of the consultation.

ARTICLE IV.—DUTIES OF PHYSICIANS IN CASES OF INTERFERENCE

CRITICISM TO BE AVOIDED

SECTION 1.—The physician, in his intercourse with a patient under the care of another physician, should observe the strictest caution and reserve; should give no disingenuous hints relative to the nature and treatment of the patient's disorder; nor should the course of conduct of the physician, directly or indirectly, tend to diminish the trust reposed in the attending physician. In embarrassing situations, or wherever there may seem to be a possibility of misunderstanding with a colleague, the physician should always seek a personal interview with his fellow.

SOCIAL CALLS ON PATIENT OF ANOTHER PHYSICIAN

SEC. 2.—A physician should avoid making social calls on those who are under the professional care of other physicians without the knowledge and consent of the attendant. Should such a friendly visit be made, there should be no inquiry relative to the nature of the disease or comment upon the treatment of the case, but the conversation should be on subjects other than the physical condition of the patient.

SERVICES TO PATIENT OF ANOTHER PHYSICIAN

SEC. 3.—A physician should never take charge of or prescribe for a patient who is under the care of another physician, except in an emergency, until after the other physician has relinquished the case or has been properly dismissed.

CRITICISM TO BE AVOIDED

SEC. 4.—When a physician does succeed another physician in the charge of a case, he should not make comments on or insinuations regarding the practice of the one who preceded him. Such comments or insinuations tend to lower the esteem of the patient for the medical profession and so react against the critic.

EMERGENCY CASES

SEC. 5.—When a physician is called in an emergency and finds that he has been sent for because the family attendant is not at hand, or when a physician is asked to see another physician's patient because of an aggravation of the disease, he should provide only for the patient's immediate need and should withdraw from the case on the arrival of the family physician after he has reported the condition found and the treatment administered.

WHEN SEVERAL PHYSICIANS ARE SUMMONED

SEC. 6.—When several physicians have been summoned in a case of sudden illness or of accident, the first to arrive should be considered the physician in charge. However, as soon as the exigencies of the case permit, or on the arrival of the acknowledged family attendant or the physician the patient desires to serve him, the first physician should withdraw in favor of the chosen attendant; should the patient or his family wish someone other than the physician known to be the family physician to take charge of the case the patient should advise the family physician of his desire. When, because of sudden illness or accident, a patient is taken to a hospital, the patient should be returned to the care of his known family physician as soon as the condition of the patient and the circumstances of the case warrant this transfer.

A COLLEAGUE'S PATIENT

SEC. 7.—When a physician is requested by a colleague to care for a patient during his temporary absence, or when, because of an emergency, he is asked to see a patient of a colleague, the physician should treat the patient in the same manner and with the same delicacy as he would have one of his own patients cared for under similar circumstances. The patient should be returned to the care of the attending physician as soon as possible.

RELINQUISHING PATIENT TO REGULAR ATTENDANT

SEC. 8.—When a physician is called to the patient of another physician during the enforced absence of that physician, the patient should be relinquished on the return of the latter.

SUBSTITUTING IN OBSTETRIC WORK

SEC. 9.—When a physician attends a woman in labor in the absence of another who has been engaged to attend, such physician should resign the patient to the one first engaged, upon his arrival; the physician is entitled to compensation for the professional services he may have rendered.

ARTICLE V.—DIFFERENCES BETWEEN PHYSICIANS

ARBITRATION

SECTION 1.—Whenever there arises between physicians a grave difference of opinion which cannot be promptly adjusted, the dispute should be referred for arbitration to a committee of impartial physicians, preferably the Board of Censors of a component county society of the American Medical Association.

ARTICLE VI.—COMPENSATION

LIMITS OF GRATUITOUS SERVICE

SECTION 1.—The poverty of a patient and the mutual professional obligation of physicians should command the

gratuitous services of a physician. But endowed institutions and organizations for mutual benefit, or for accident, sickness and life insurance, or for analogous purposes, have no claim upon physicians for unremunerated services.

CONTRACT PRACTICE

SEC. 2.—It is unprofessional for a physician to dispose of his services under conditions that make it impossible to render adequate service to his patient or which interfere with reasonable competition among the physicians of a community. To do this is detrimental to the public and to the individual physician, and lowers the dignity of the profession.

SECRET DIVISION OF FEES CONDEMNED

SEC. 3.—It is detrimental to the public good and degrading to the profession, and therefore unprofessional, to give or to receive a commission. It is also unprofessional to divide a fee for medical advice or surgical treatment, unless the patient or his next friend is fully informed as to the terms of the transaction. The patient should be made to realize that a proper fee should be paid the family physician for the service he renders in determining the surgical or medical treatment suited to the condition, and in advising concerning those best qualified to render any special service that may be required by the patient.

CHAPTER III

THE DUTIES OF THE PROFESSION TO THE PUBLIC

PHYSICIANS AS CITIZENS

SECTION 1.—Physicians, as good citizens and because their professional training specially qualifies them to render this service, should give advice concerning the public health of the community. They should bear their full part in enforcing its laws and sustaining the institutions that advance the interests of humanity. They should cooperate especially with the proper authorities in the administration of sanitary laws and regulations. They should be ready to counsel the public on subjects relating to sanitary police, public hygiene and legal medicine.

PUBLIC HEALTH

SEC. 2.—Physicians, especially those engaged in public health work, should enlighten the public regarding quarantine regulations; on the location, arrangement and dietaries of hospitals, asylums, schools, prisons and similar institutions; and concerning measures for the prevention of epidemic and contagious diseases. When an epidemic prevails, a physician must continue his labors for the alleviation of suffering people, without regard to the risk to his own health or life or to financial return. At all times, it is the duty of the physician to notify the properly constituted public health authorities of every case of communicable disease under his care, in accordance with the laws, rules and regulations of the health authorities of the locality in which the patient is.

PUBLIC WARNED

SEC. 3.—Physicians should warn the public against the devices practiced and the false pretensions made by charlatans which may cause injury to health and loss of life.

PHARMACISTS

SEC. 4.—By legitimate patronage, physicians should recognize and promote the profession of pharmacy; but any pharmacist, unless he be qualified as a physician, who assumes to prescribe for the sick, should be denied such countenance and support. Moreover, whenever a druggist or pharmacist dispenses deteriorated or adulterated drugs, or substitutes one remedy for another designated in a prescription, he thereby forfeits all claims to the favorable consideration of the public and physicians.

CONCLUSION

While the foregoing statements express in a general way the duty of the physician to his patients, to other

members of the profession and to the profession at large, as well as of the profession to the public, it is not to be supposed that they cover the whole field of medical ethics, or that the physician is not under many duties and obligations besides these herein set forth. In a word, it is incumbent on the physician that under all conditions, his bearing toward patients, the public and fellow prac-

tioners should be characterized by a gentlemanly deportment and that he constantly should behave toward others as he desires them to deal with him. Finally, these principles are primarily for the good of the public, and their enforcement should be conducted in such a manner as shall deserve and receive the endorsement of the community.

EFFICACY OF TONSILLECTOMY FOR REMOVAL OF FOCAL INFECTION

Clinical experience with patients who have undergone tonsillectomy has led Paul S. Rhoads, Evanston, Ill., and George F. Dick, Chicago (*Journal A. M. A.*, Oct. 20, 1928), to the belief that the disappointing results reported by various observers may often be due to the fact that in a large number of instances the tonsils are incompletely removed. They have had several patients who were not benefited by their original tonsillectomies but who did improve strikingly after the removal of infected pieces of tonsillar tissue left from the first operation. In routine physical examinations of the nurses entering training at the Presbyterian and Cook County hospitals, they have found fairly large pieces of tonsillar tissue remaining in the throats of 290 of 403 (73 per cent.) who have had tonsillectomy. That such "tonsil stumps" frequently cause trouble is shown by a series of twenty-three cases collected almost entirely from their own services in less than a year, in every one of which the indication for tonsillectomy was definite and in which improvement resulted in all that were followed. The bacterial count, microscopic appearance and association with systemic lesions of a series of tonsils removed for the first time is compared with similar data on "tonsil stumps" remaining from previous tonsillectomies and removed for a variety of reasons. The average count per gram in the "tonsil stumps" was 7,341,000, as compared with 5,693,000 in tonsils removed for the first time. The total weight of the "stumps" removed from a single patient varied from 0.575 to 5.496, averaging 2.174 Gm., while that of tonsils removed for the first time varied from 3.243 to 9.80, averaging 5.918 Gm. The average total bacterial count of the "tonsil stumps" removed from a single patient was 15,588,000, while that of tonsils removed for the first time was 33,345,000. The outstanding change in the "tonsil stumps" examined was fibrosis.

RECURRENT HERPES ZOSTER

A. L. Skoog, Kansas City, Mo. (*Journal A. M. A.*, Sept. 15, 1928), reports the case of a man, aged thirty-four, single, who complained chiefly of sharp shooting pains in the legs. The entering diagnosis was tabes dorsalis and morphinism. The family history was negative. He had had gonorrhea and a chancre. He was not properly treated after the appearance of the primary lesion. He noted a swelling of the right knee in about one year. There soon followed attacks of epigastric distress and sharp shooting pains in the legs, necessitating a cessation from work. Then several good courses of treatment for syphilis were given. Much relief was obtained from these. A little later he was operated on for suspected gallbladder or gastric trouble, and the appendix was removed. The pains were not relieved by these operations. Then he was given morphine for the crises, receiving as much as three grains (0.2 Gm) daily. The morphine habit had continued until three weeks before his entry into the hospital, at which time he voluntarily stopped using the drug but stated that he had "gone to pieces nervously" since. Charcot joints developed suddenly in both feet, twenty months after the first examination. A roentgen examination of both knee joints showed the left normal. On the right was seen a distortion of the patella and marked changes in the bone and articular surfaces. Few hypertrophic manifestations were recorded. Clinically, the joint seemed to be a Charcot, but the roentgenologist would not

make a positive diagnosis. As the patient had not obtained any relief from several courses of anti-syphilitic and symptomatic treatment, it was decided to give him tertian malaria. He was permitted to have eighteen well-developed paroxysms. Following this he improved somewhat for a few months. Then the gastric crises appeared with the same severity and frequency and with the usual zoster. When first coming under Skoog's observation and treatment, the patient gave a history of having had recurrent vesicular eruptions over the upper posterior surface of the thighs. They might appear on the right, left or bilaterally, usually about five or six weeks apart. Each eruption would last from seven to ten days with the usual zoster course. Several or many of the typical clusters were noted each time. Not much pain was present. The clusters occurred only during the crises. The skin area involved has been limited to the second sacral metamere. The clusters appeared quite regularly. The duration of the recurrent herpetic zoster attacks was something more than three years. Skoog concludes that true recurrent herpes zoster is uncommon. The self limitation by the establishment of immunity may account for this state relative to ordinary zoster. Syphilis in a patient seems to favor the possibility of the development of herpes zoster. While it is generally accepted that some organism produces ganglionitis and secondarily the eruption in most cases of herpes zoster, it is possible that in a small percentage there may be some additional etiologic factor or other sole cause, whether syphilis, trauma or neighborhood disease, such as tuberculosis and malignant neoplasms.

CASE OF PELLAGRA FOLLOWING VOLUNTARY REDUCTION OF DIET

Paul S. Carley, New York (*Journal A. M. A.*, Sept. 22, 1928), reports the case of a white woman, aged thirty-three, who complained of abdominal distress, loss of weight, sore mouth, and roughening and redness of the backs of both hands. The history of the present complaint began when the patient was twenty-seven years of age. She described her symptoms as acute attacks of "indigestion," which consisted largely in a feeling of abdominal distention, a desire to vomit, and slight giddiness. She decided that certain foods disagreed with her and eliminated pork and cereals from her diet. Following a laparotomy for ovarian cyst a full diet was prescribed by a physician and her complaint disappeared. Later the abdominal distress reappeared, and again she eliminated certain foods from her diet. About this time she began to think that she was developing a cancer of the stomach, and this caused her further to reduce her diet. The process of elimination continued until her diet was so restricted that it contained no milk, vegetables, meat or eggs; she was existing largely on cooked cereals. A diagnosis of early pellagra was made. She was given a diet list containing one pound of canned tomatoes and one quart of cow's milk daily in addition to an ordinary unrestricted diet. She was instructed further to take two ounces of dried brewers' yeast, divided into three doses, in water each day. Fifteen days later, the dermatitis had disappeared and the mouth symptoms were clearing up. Owing to difficulty in obtaining cow's milk, she was put on a normal mixture of dried whole milk and water at this time. The patient was seen at fortnightly intervals. The gastric distress had disappeared soon after she was informed that she had no symptoms of carcinoma. There has been, up to the present, no recurrence of symptoms.

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EDITORIALS

EVALUATING TONSILS

There is an old saying that you cannot tell from the size of the frog how far he can jump. Analogous to this is the statement that you cannot tell from the size and appearance of a pair of tonsils how much pathologic disturbance they may create, some of which may be far distant from the throat.

The function of the tonsils is not definitely known. Laryngologists have not concerned themselves, very much, with the physiology of the tonsil, or a study of its value when normal, and probably for the reason that as a tonsil is lymphatic tissue, its function, if any, can be taken care of by the balance of the lymphoid tissue of the throat which is perhaps ten times that of the tonsil in amount. That there is a direct relationship between large cervical glands and the tonsil is unquestioned, as also the apparently established fact that a focus of infection within the tonsil may give rise to general sepsis or to septic disturbances elsewhere in the body. One authority (Kyle) says that the large tonsil is not always necessarily a surgical tonsil, as it may be entirely free from any disease condition, not interfere with phonation, be free from any adhesions to the anterior or posterior pillars, and from its location does not involve by pressure the eustachian tubes. On the other hand, a very small tonsil, bound down by adhesions, and in which there has formed back of the tonsil a pocket filled with infectious material, the product of decomposed food, and secretion, furnishes an element of danger to its possessor. Such a tonsil, although very small, is a source of constant absorption of poisonous material, and is decidedly a surgical tonsil. The imbedded tonsil which lies high up in the tonsillar fossa also is a surgical tonsil because of the location. Owing to its position, high up in the fauces, it interferes with free drainage of the eustachian tube, also the free motion of the anterior and posterior pillars. In other words, it interferes with the physiological function of the pharynx and nasopharynx. The adherent tonsil is surgical for the same reason.

When repeated attacks of acute inflammatory processes involving the tonsil and the pillars occur, the surrounding connective tissue becomes greatly thickened and bands of adhesion form between the pillar and the tonsil. Numerous pockets

thus are formed which collect material and which are a constant source of irritation. There is also, on account of the infectious material retained within the tonsillar structure, great danger of infection of the cervical lymphatic glands. The cryptic tonsil, which may or may not be imbedded or adherent, is equally a surgical tonsil. While there is not so much involvement of the adjacent connective tissue as in the adherent tonsil, the constant source of infection is quite as marked, and the tonsil thus becomes a surgical tonsil.

In the early days of this country it used to be said that all Indians were bad Indians and not to be trusted. Some physicians go so far as to say that all tonsils are bad tonsils and therefore not to be trusted. Certainly, in the light of our present knowledge, brought about through investigation and practical experience, we are bound to believe that any tonsil may be looked upon with suspicion if a focus of infection not found elsewhere in the body is thought to be producing a systemic disturbance. We once heard a laryngologist say that the test for infectiousness of an apparently clean tonsil was to apply a local anesthetic and squeeze the tonsil with forceps. If this process yields infectious material, then the tonsil is an infected tonsil and should be removed. That this practice does not prove conclusive in every instance is evidenced by the case of a patient suffering from arthritis who had been in a general hospital and studied for a period of two weeks by a number of very able clinicians, the conclusion finally arrived at being that two very small, clean and apparently innocent tonsils might be the cause of the trouble and in consequence their removal was urged. The laryngologist to whom the patient was referred objected to removal of the tonsils on the ground that they were very small, apparently never had given any trouble, and squeezing gave forth no infective material. However, the tonsils were enucleated, and much to the surprise of the operator were shown to have infective material posterior to them. As a sequel to the operation the patient recovered from the arthritis and attained better health than for many years before.

No doubt many innocent tonsils have been removed without justification, as it seems popular to slaughter tonsils because they are so easy to get out and offer anyone, even one inexperienced in operating, an opportunity to try his hand at surgery and collect a respectable fee therefrom, yet much of the surgery is mutilating, shamefully so, as evidenced by the unfortunate results seen in practically every community. Probably it is this almost universal attack on the tonsils which deters the conscientious laryngologist from recommending tonsillectomy except in those cases where the operation seems indicated beyond the slightest question of doubt. That some surgical tonsils are overlooked cannot be denied, though when we analyze all of the factors that enter into consideration of this subject we are faced with the con-

clusion that we have no certain way by which in every case we can tell whether or not a tonsil is responsible for a systemic or local pathologic manifestation arising from the tonsil itself. Perhaps a good rule to follow in those cases in which a focus of infection is responsible for the trouble is to eliminate the more glaring defects first, providing the tonsils are questionably the cause of the trouble, and then remove the tonsils as a last resort if previously the cause has not been found.

It goes without saying that the surgical tonsil should be removed or enucleated with as little traumatism as possible, and certainly without the mutilating effects seen so often after surgery done by the untrained and bungling operator. Unless there is a contraindication in the way of age, emaciation, active infection, tendency to bleeding, or the presence of some other condition which in itself makes any operation hazardous, the clean and skillful removal of tonsils never has harmed any person, and has proved beneficial probably in countless thousands of cases. However, there should be justification for any operation, no matter how trivial, and in evaluating the tonsil as a focus of infection we must take into consideration the possibility of the tonsils being the disturbing factor rather than something else.

AGAIN ABUSE OF MEDICAL CHARITY

In discussing the abuse of medical charity in previous numbers of *THE JOURNAL* we seem to have stirred up some peevishness on the part of certain welfare workers and some nurses employed by the schools, the Red Cross, and the social service organizations. Analyzing the complaints and arguments that have been offered by those who seemingly think that the medical profession is getting too exacting and too hard-hearted in demanding some investigation of charity medical services, we arrive at but one conclusion, and that is that a certain number of welfare workers, some of whom are pulling down good salaries, seem to think that physicians have no right to a place in the sun but should cheerfully be "the goat" in any kind of uplift work that requires the skill and services of the physician and ask no questions. For instance, we are told that one very prominent and lovely woman engaged in uplift work questioned the right of a physician to make any investigation or complaint concerning charity work sent to him by the school nurses, the Red Cross, or the Visiting Nurse League, though the physician in question thought it was time to call a halt on free medical attention for patients who were able to afford automobiles, radios, and pay admission to moving picture theatres.

We have no apologies to make concerning anything that we have said in *THE JOURNAL* regarding the abuse of medical charity, and we want to add a little more fuel to the fire that has been started. In doing this we will start out by criti-

cizing the medical profession for so tamely submitting to many impositions in the name of charity. No class of people can match the medical profession in donations in substantial charity and *real service* to the down-trodden. Throughout the ages, and including the present time, every reputable physician has responded to the call of the sick and suffering, irrespective of pecuniary reward, and not one of them ever has refused to extend charity where charity was due. However, there isn't a reputable physician in Indiana who has not been imposed upon times without number by presumably poor persons who have sought and received his skillful services without paying for them or even intending to pay for them. The busier and more prominent the physician the greater is the demand upon his time by the so-called charity patients. Much of the work that is taking the time of the paid uplifter is devoted to the furnishing of gratuitous medical care to the deserving, and, as we happen to know, to some who are not deserving. We venture to say that not once in a hundred times has any reputable physician balked at the request of any uplift organization to give of his time and skill to the worthy poor. He has been such a willing pack horse that he has permitted various organizations and well-meaning individuals to pile upon him a load that not only is hard to bear but one that he should not bear, in his own interests or in the interests of society at large, for when all is said and done much of the charity work that is being done today is pauperizing the people and causing them to lose their self-respect. The phase of this question which annoys the physician at the present moment is the unabashed way in which various agencies and individuals will ask physicians to furnish gratuitous services to those not deserving of such consideration. If the individual physician balks he is plainly informed that the services can be secured on such terms at the hands of other physicians, or at the clinics of various state institutions.

Just why should the physician be expected to donate his services in *any* case, even though he may from sentimental and charitable reasons be inclined to do so? *Isn't it the duty of the community to care for its indigent and poor?* Does the community ask the grocer to furnish food to the poor gratuitously? Does it ask the shoe and clothing merchants to furnish shoes and clothes to the poor without payment? In fact, does the community ask any merchant or laboring man *other than the physician* to furnish either merchandise or services to the poor gratuitously? Medical and surgical services are just as much of a necessity as food, and why should the physician be expected to donate his services, and his knowledge, which is his stock in trade, any more than the merchant furnishes his goods, or the plumber furnishes his time? Yet the physician.

generous and sentimental as he is, gives of his time and skill to the real poor without asking for reward. In addition to this he cheerfully subscribes money for benevolent purposes, and he helps pay for clothing, shoes, food and coal furnished the poor by merchants who are smart enough in a business way to make sure that they lose nothing in the transaction. Furthermore, not all of the charity medical services go to well-deserving charity, for it is a well-known fact that many people, sometimes encouraged by welfare organizations, solicit and receive gratuitous medical services when amply able to pay small fees for the same without any great hardship. Some of the recipients of free medical service are known to be able to support good automobiles, radios, pianos, good clothes and they spend money regularly for amusement. This could be checked by some system of investigation put forth with the idea of eliminating the impostors.

Another thorn in the flesh of physicians is the practice of some school, Red Cross and Home Service nurses in attempting to make diagnoses themselves, at other times discrediting the diagnosis and treatment of physicians, and proselyting for certain physicians, even to the extent of imposing upon such favored physicians by bringing to them as charity patients those able to pay something for the service. This abuse also could be checked by more and better supervision of the activities of nurses engaged in various phases of uplift work.

To our notion a solution of the medical charity proposition is to have it under the control of a unified medical profession. Medical and surgical services for the deserving poor should be paid for by the community, either through a fund created by taxation or a fund raised by voluntary subscription like that given the Community Chests. The services should be rendered at a nominal cost and the profession as a whole should agree to give good and faithful service as a matter of duty. The fees collected should be pro-rated or divided in some equitable way, and should be paid by the community just as willingly as the charges made by merchants for shoes, clothes, food, coal or other necessities. The profession as a profession should conduct a charity clinic to meet the charity demands, and that clinic also could care for those people in moderate circumstances who are not justly entitled to charity and yet are able to pay a nominal fee for professional services. Details of operation and management can be worked out and some little thought will be required for the subject. Improvement should be made as increasing experience indicates. Certainly some method must be adopted in every populous community to settle this vexatious question of furnishing adequate medical and surgical services to the indigent and the deserving poor *without injustice to any-*

one, and without pauperizing and causing loss of respect to those needing assistance. As it is now there is great abuse of medical charity, and it works an injustice to all concerned, to say nothing of arousing animosities and antagonisms which should not exist. The medical profession as a profession very justly is complaining of the chaotic and unfair condition of things as existing at present, and it probably is up to the medical profession to offer a definite and comprehensive plan of operation that will solve the problem. Unless the medical profession does take hold of the matter and straighten it out, there will be another link added to the chain of evidence being welded by certain individuals in behalf of state medicine which would be the worst solution that the problem could have. We should respect the future progress and welfare of the medical profession as also the welfare of the people.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

COLLECTING fifteen dollars for blotters upon which the professional card of some physician is to be placed, and the blotters distributed in hotels, banks, post office buildings and other public places, is a new scheme offered by swindlers and exposed by the Rochester (New York) Better Business Bureau. Even if the blotters were delivered, which they are not, the scheme is worthless.

You are now delinquent if you have not paid your dues to the Indiana State Medical Association. As a delinquent you are not entitled to any more numbers of THE JOURNAL nor are you entitled to medical defense by the Association in case you are sued for malpractice. You cannot afford to lose either, so if you are delinquent, through neglect, send your check for dues immediately, and thus reinstate yourself in good standing.

WE have been wondering if sooner or later we would not hear of a case of ephedrine poisoning, and now comes a report in the *Journal of the A. M. A.* for January 26, 1929, of a case of ephedrine poisoning following the prolonged use

of ephedrine for relief of asthma. In explanation perhaps it would be well to say that the patient was suffering from hyperthyroidism, and it is well known that hyperthyroidism and adrenalin-ephedrine do not mix well.

THE *Chicago Medical School News*, with an announcement on the front cover page of its November number calling for a three-year campaign for a million-dollar endowment and an A rating, rubs the fur the wrong way when it shows so little respect for the feelings of editors of reputable medical journals as to flash in their faces the advertising of pharmaceutical specialties that are not approved by the Council on Pharmacy and Chemistry of the A. M. A., and which could not be advertised in any reputable medical journal in the United States.

WE desire to call the attention of our legislative committee to the necessity of scrutinizing carefully and analytically the new all-time health officer bill before giving approval for its enactment into law by the present legislature. We also desire to call the attention of our legislative committee and the medical profession of the state to the fact that it would be a serious matter if our State Board of Health should be composed of members a majority of whom are lay persons. As one physician says, "There is a nigger in the woodpile" in this last move.

THERE is an old saying that it takes more than one swallow to make a summer, and it takes more than one case to prove the general efficacy of any new form of treatment, but the editor of THE JOURNAL got a severe wallop from a streptococcic infection in connection with five broken ribs, and a shot of streptococcic *antitoxin*, repeated in twenty-four hours, put Mr. Streptococcus on the run, with a sudden drop of temperature, relief of pain and discomfort, and the onset of a feeling of well being. Perhaps the result is coincidental, but we believe in giving the devil his dues.

AGAIN we have a complaint concerning the treatment of rabies cases by the State Board of Health, and calling attention to the inconsistency of compelling these cases to go to Indianapolis where the treatment is administered gratuitously, whether the patient is poor or not, and the patient is kept under observation at a large expense which must be borne through taxation. It is pointed out that antirabic treatment can be given by any fairly well-trained physician, so why should it be necessary to refer all cases to Indianapolis? We are pleased to learn that a bill to correct this practice has been introduced in the present legislature.

PHYSICIANS are the only ones who should prescribe iodine for goiter. They alone are able to differentiate between the cases which will be helped by it and those which will be injured, according to the statement of Dr. Goethe Link, in the November number of the *Indianapolis Medical Journal*. He sounds a note of warning against the use of iodine in exophthalmic goiter except for the purpose of producing an artificial remission of the disease in preparation for surgery. Much harm may be done when it is used in an attempt to treat and cure the patient medically. It is best to withhold it until the patient enters the hospital for operation. Advertising the use of iodine by the laity was a great mistake.

ONE of our correspondents says nothing peeves him more than to refer a patient to a city specialist and receive no acknowledgment, even when a letter is sent with the patient asking for a report as to the pathological findings. We believe that this complaint is not uncommon, and there is no excuse for it if physicians will conform to the ordinary rules of courtesy and decency as pertains not only to our profession but business as well. One of our peeves is to write to some physician asking for important information and receive no response, even to one or two follow-up letters. That is another feature that is inexcusable, for no matter how busy the physician may be he can delegate the work to a secretary or bright office girl.

AN old swindling game is being worked upon some Indiana physicians, and several have been trimmed to the tune of five to twenty-five dollars. A well-dressed stranger appears in the doctor's office and says he is a salesman and thinks he is coming down with the "flu" and wants to get some treatment that will tide him over until he can get home. He gives his symptoms as headache, backache, sore throat, running nose, etc. He gets advice, sometimes a prescription, and tenders a check for from five to twenty-five dollars more than the professional charge, and after collecting the money decamps. In due course of time the check is found to be fraudulent, and in the meantime physicians in other surrounding towns have been worked by the same swindler.

A CHOICE bit of buncombe and apparently personal advertising appears as a news item in the *Fort Wayne News-Sentinel* for January 21st, and is as follows:

"Science to Remake Babe Born Legless and with One Arm.

"Chicago, Jan. 21—(I.N.S.)—A baby girl, born legless and with only one arm, will be entirely "remade" by modern science, Dr. Henry Bascom Thomas, professor of orthopedic surgery at

the University of Illinois College of Medicine, announced today.

“Two artificial legs and an artificial arm, equipped with wires attached to little loops of permanent skin, will permit the child to control muscles and actually walk, eat, write and perform other acts of a normal child, Dr. Thomas claimed.”

POSTGRADUATE medical courses in Europe abound with sightseeing and travel and have for the most part been organized and sponsored by individual physicians who, knowing the wants of the physician, have arranged very instructive and entertaining tours. Evidently some of the commercial tourist agencies have become jealous, and now one or two of them are organizing and sponsoring postgraduate medical tours to Europe, but without offering the same scientific and professional urge that has made other professional tours so satisfactory. When you begin to commercialize a professional tour you spoil it, and while we believe that any first-class tourist agency can better handle the travel and business arrangements connected with any tour, we believe that the professional end of it should be left to medical men.

It is enough to make a horse laugh to read the advertising of Listerine in the daily press. One would think that science never did and never will produce an antiseptic that possesses the virtue of Listerine. The astounding statement is made that the remedy will kill any of the virulent germs when used full strength, and it is too bad that someone cannot counter with the statement that if Listerine possesses such virtue it also possesses properties that would destroy tissue. The National Advertising Association has been attempting to enforce a definite rule concerning the truth in advertising, but that Association is exceedingly lax when it comes to censoring proprietary medicine advertising. Physicians should do what they can to offset this vicious advertising by advising their patients not to put the faith in Listerine that the advertising would seem to justify.

A PHYSICIAN who in a very large measure upholds the dignity and honor of his vocation, and enjoys a very large and lucrative practice which he earned through ability and conscientious performance of duty, is not spoken of well by his confreres as a direct result of his real or implied criticism of professional actions and attainments of his confreres. This is all wrong and works to the disadvantage of not only the physician himself but the members of the medical profession individually and collectively. In reality there should be no occasion for insincerity, rivalry or enmity among physicians. Those are the features which create dissension and misunderstanding.

We should refuse to uphold corruption, dishonesty and unprofessional conduct in our confreres and be open about it, but, on the other hand, in most communities there is need for more sympathetic understanding and genial comradeship among confreres.

“ALL work and no play makes Jack a dull boy.” Most physicians are forgetting how to play. Their play is their business. They seldom if ever take a real vacation. Each year it is harder to get away from work, as also harder to enjoy recreation if they do get away. Not many of them really are devoted to golf. How many of them can enjoy a few days in the field with rod and gun? How many of them will tramp through scenic grounds? In fact, how many of them do anything except stick to the daily grind about 364 days out of the 365? Is it any wonder that physicians are narrow-minded, selfish and suspicious of each other, and in reality fall down in doing the work that they really could do if they were mentally and physically better equipped for it? It has been our observation that the busiest men, the men who do the best work and the men who accumulate the most of this world's goods, are those who regularly take vacations of the real kind.

IN this number of THE JOURNAL we are publishing the opinion of the attorney general concerning medical treatment and laboratory work done at the laboratory of the State Board of Health. The attorney general points out that it is not compulsory on the part of the State Board of Health to do blood examinations and other laboratory work for all who come and with no questions asked. It is quite true that the law gives the State Board of Health considerable leniency in adopting means and measures that seemingly are in the interests of public health, but we find nowhere in the law a specific request or demand that the State Board of Health shall do certain things. Therefore, we contend, as we have contended all along, that much of the extra work that is being done by the State Board of Health, and which very properly may be considered an abuse of medical charity, had its origin in the State Board of Health through election and not through necessity or compulsion.

THREE confidence men were arrested on November 28, 1928, following an investigation by the Better Business Bureau of Rochester, New York, concerning an attempt to dispose of a worthless oil lease to a physician. The scheme, as offered by the glib promoters, was one promising big returns through the sale of a lease of the Standard Oil Company, and one of the promoters even posed as a Standard Oil representa-

tive in order to add further inducement. Fortunately, the physician had sense enough to apply to a Better Business Bureau where the fraudulent character of the proposition was unearthed. Physicians are not the only class of people who are trimmed by confidence men, but they are trimmed often enough to justify the warning that before you invest, it is wise to investigate, and a good better business bureau can assist you. Incidentally, we are of the opinion that any county medical society in Indiana will be well repaid for taking out a membership in its local better business bureau.

HERE is a chance for real service by the Woman's Auxiliary of the American Medical Association, and of course that applies to the Indiana branch. The Newton Bill, now in Congress, is intended to renew the obnoxious Sheppard-Towner Act which has cost the government \$1,200,000 yearly. The Newton Bill will be acted upon within the next six weeks. This bill is opposed by the American Medical Association, and by all right-thinking physicians. It is supported by a lot of misguided women who have not appreciated its obnoxious features, and who have been guided in their support by maudlin sentiment and a lot of manufactured statistics that do not tell the real story. We hope that the wife of every physician in Indiana will use her influence in opposing the passage of this Newton Bill, and she can do this not only by having her voice felt in Washington but also in the various women's organizations with which she is connected. Here is a chance for real service; now let's see what the Indiana Woman's Auxiliary can do!

FOR many years the editor of *THE JOURNAL* has used the dictaphone and finds it one of the greatest time-saving devices ever employed. In reality it is a stenographer on duty at any hour, day or night, and thus is a great convenience for answering correspondence or making a record of important matters at a time when perhaps the regular stenographers are busy or even at home and asleep. The editor of *THE JOURNAL* never appreciated the dictaphone quite as much as he has during the past few weeks when laid up in bed with five broken ribs, two of them badly crushed, and during odd hours when he was in no mood to read he has been able to answer correspondence or even get a few editorial notes off his chest when the spirit moved, no matter whether it was two o'clock in the afternoon or two o'clock in the morning! This isn't intended as an advertisement for the dictaphone, but if any of our busy professional friends has not utilized the dictaphone we suggest that he do so at once and see what a great convenience it proves to be.

CAN anything be more inconsistent than for chiropractors to use drugs in the treatment of disease? And yet in several states it has been necessary to prosecute chiropractors for that very practice. Of course, courts have held that the chiropractors are not educated or trained to use drugs, and therefore are guilty of an infraction of the medical laws, and yet, right on the heels of this comes an announcement that the chiropractors of several states are going to attempt to secure a law applicable to them that will permit them to practice medicine as they see fit, and in particular to prescribe drugs as seems indicated by them. As we often have said in *THE JOURNAL*, there isn't one of the pseudo-medical cults that is not trying to secure all of the privileges granted to the regular practitioner of medicine without going through the formality of being educated and trained in the basic sciences. The absurd and incomprehensible thing about the whole situation is that lawmakers and laymen do not see the inconsistency of this stand, to say nothing of its dangers.

No matter what the enthusiast may say, the fact of the matter is that the whole subject of sero-bacterin and vaccine therapy is in a chaotic condition, and *The Journal of the A. M. A.* deserves great credit for condemning in no uncertain tones the extravagant claims put forth for sero-bacterins by such firms as Mulford and Sherman who seem to be guilty of exploitation of sero-bacterins and vaccines that in a large measure are deceptive and misleading. To the intelligent and analytical observer it must have occurred that vaccine and sero-bacterin therapy, either of the preventive or curative type, is about a fifty-fifty shot. Just about the time that we have a series of cases that seem to show marked evidence of results directly traceable to the treatment, we run up against another series that knocks our hopes into a cocked hat. We then are inclined to believe that whatever success we have secured has been merely coincidental. We do not decry vaccine and sero-bacterin treatment, but we do believe that there has been a lot of extravagant commendation of it that is unjustified in the light of experience.

AGAIN we desire to remind those who plan to attend the Portland session of the American Medical Association this year to get in touch with Tom Hendricks, executive secretary of the Association, 804 Hume-Mansur Building, Indianapolis, and tell him how they would like to go and ask if any assistance can be given. A movement is on foot to have one or more Pullmans, devoted exclusively to Indiana physicians and their wives, hooked on to a train in Chicago which will go by the Union Pacific, with short stops at Denver, Colorado Springs, Salt Lake City, Yellowstone

Park, and thence on to Portland. The return trip may be made independently by any route desired, though it is hoped that enough will select a certain route to justify running a Pullman through on the home trip, with stops at scenic points. Incidentally, the *Journal of the A. M. A.* has published two Indiana rates for the round trip to Portland, and they are \$94.53 from Fort Wayne, and \$95.70 from Indianapolis. This includes railroad fare, going and coming by different routes, but does not include Pullman accommodations.

WE have just learned that a prominent Indiana physician has rendered a bill for attention bestowed upon a confrere during a serious illness. We have nothing but censure for such a physician. It not only is a courtesy but a moral obligation that a physician owes to the profession to care for any of its reputable members cheerfully without pecuniary compensation. The Principles of Ethics says that a physician should always cheerfully and gratuitously respond with his professional services to the call of any physician practicing in his vicinity or of the immediate family dependents of physicians. However, the code of ethics says further that when a physician from a distance is called on to advise another physician or one of his family dependents, and the physician for whom the service is rendered is in easy financial circumstances, a compensation to at least meet the traveling expenses of the visiting physician should be proffered. When such a service requires an absence from the accustomed field of professional work of the visitor, that might reasonably be expected to entail a pecuniary loss, such loss should, in part at least, be provided for in the compensation offered.

A COMMITTEE of five has been appointed by the Board of Trustees of the American Medical Association to investigate and decide upon the advisability or necessity of establishing a national home for indigent physicians. A few years ago an investigation of this kind was made by the officers of the American Medical Association and at that time no evidence could be procured to indicate that there was any need for benevolence on a large scale inasmuch as few indigent physicians could be found and those found were well cared for by relatives or friends. However, as the subject again has been brought up for decision, the Board of Trustees of the American Medical Association has asked a committee on the care of indigent physicians to investigate the subject most carefully with the idea of finally settling the question. Therefore, so far as Indiana is concerned, we desire that the committee should know of any reputable indigent physicians within the confines of the state who are not cared for adequately by relatives or friends, and it will be

a great help if the information is sent either to the editor of *THE JOURNAL*, who is a member of the national committee, or to the executive secretary of the Indiana State Medical Association, who in turn will give the information to the committee.

THE Chicago Department of Health has discontinued the administration of diphtheria immunization treatment except in indigent cases. It is hoped that through this action the medical profession of Chicago will take the opportunity to care for its clientele. As a part of the diphtheria prevention program of the Chicago Department of Health and the Chicago Medical Society, the individual doctors of Chicago have received a letter for their signature, soliciting the cooperation of parents in having their children immunized. The Board of Health says that it believes that it is necessary to call this matter to the individual attention of parents if we are to sell the idea of insurance against diphtheria. Family physicians are the best ones to accomplish this, and accordingly the Board of Health is asking each individual physician to sign and send one of the letters to each of the families attended by the physician, in which are children from one to ten years of age. It is expected that the letters will be sent independently or inclosed with statements. By way of explanation it is said that such a procedure is consistent with the practice of preventive medicine by the physician, is in keeping with the ethics of the profession, and is endorsed by the Chicago Medical Society. Why not adopt such a plan for Indiana?

CHIROPRACTORS are making an effort to secure a separate board of chiropractic examiners for Indiana and a bill to that effect has been introduced in the present Indiana legislature. It is but natural that the chiropractors should want a board of their own, and for the reason that they desire to lower the educational requirements so that more can get in legally to practice chiropractic. It is a great pity that we cannot stop all this wrangling over the question of licensing members of pseudomedical cults to practice medicine in Indiana. What we need is the enforcement of the basic science requirement of all those who would treat the sick and afflicted, and if anyone is adequately educated and trained in the basic sciences of medicine then it doesn't make any difference what his practice may be—he can rub the spine, twist the joints, hammer patients on the head with a mallet, resort to prayer, profanity, incantations or anything else thought to be efficacious in the particular illness under consideration. The point of the whole matter which legislators as well as the public should understand is that when a person is educated in the basic sciences and knows something about the anatomy, physiology and pathol-

ogy of the human body he never shows any tendency to wander off to any bizarre and inconsistent methods of treatment. Separate examining boards for the cults is not granting fairness to the cults, but rather recognizing their desire to lower the standards.

AN authoritative statement, addressed to the medical profession, has been published by the *British Medical Journal* concerning the nature and extent of the illness of the king. It is emphasized that neither in its inception nor its subsequent course has the illness conformed to what is called pleuro pneumonia, but rather it has been a severe streptococcic septicemia, which by a fortunate happening localized at the base of the right lung, first imperfectly, and later on as an empyema forming between the base of the lung and the diaphragm. The picture at the present time is that of the aftermath of a severe general infection.

An amusing incident in connection with the King's illness has been the receipt at the Royal Palace of thousands of pills, potions, and secret remedies of every description that have been offered by well-meaning people and positively guaranteed to cure the king. There also have been offered the services of some quack doctors and members of the pseudo-medical cults who plead for just an opportunity to demonstrate the success of their peculiar forms of treatment. Among those soliciting an opportunity to serve has been not a few frankly insane persons. The *London Times* is authority for the statement that England's best trained and most highly respected medical men have been in consultation on the case, and that the British public has every reason to believe that absolutely nothing has been left undone to bring about restoration of the king's health.

THE Indianapolis Medical Society has established a committee to study the importance of abuse of medical charity, and the committee is asking individual physicians to report concerning patients who are receiving medical treatment or operations at free clinics and hospitals who should be paying for the same. The committee asks physicians to cooperate in the following ways: "First, by calling attention to individual examples where in the opinion of any physician the patient or patients should pay for services that are being received gratuitously at the clinics or hospitals. Second, individual physicians are asked to give an opinion concerning the methods or standards that should be used in determining when a patient should receive free medical care. Third, individual physicians are requested not to refer patients to free clinics or hospitals when they are able to pay for the medical and surgical service."

Every populous community has the same problem to solve. It is fortunate that in many localities the medical profession is studying the situa-

tion with the idea of adopting measures to solve the problem.

NOTICES concerning the deaths of eighteen Indiana physicians occurring within a period of thirty days appear in this number of *THE JOURNAL*. Perhaps we are unduly alarmed but it seems to us that the ranks of our medical profession in Indiana have had some unusually large reductions in number during the past year or two, and besides we have lost many of our most prominent men. However, even physicians must die, though it does seem as though many of those who have died recently, have gone during the most useful period of their lives.

"JUST why should the Indiana University hospitals send out emissaries to search the highways and byways for patients?" This was one of the questions put to us by a very prominent physician in the central part of the state, who bases his complaint upon the interpretation of the actions and speech of the nurses or other representatives of the Riley, Coleman, and Long Hospitals in Indianapolis. Attention is called to the bulletins sent out by the university hospitals which bear fairyland stories concerning the wonderful results accomplished for patients, and presumably these bulletins are distributed widely to lay people as propaganda in the interest of the University hospitals. "Just why should it be necessary to send out these eulogistic case reports found in the bulletins?" says the complainant. To which we say, someone has over-stepped the bounds of propriety. No one who is intelligent and is conversant with the facts can deny that the University hospitals in Indianapolis are doing very high-grade work, and the members of the regular medical profession, individually and collectively, should recognize the fact that the University hospitals afford a place for the proper care of suitable patients who are indigent and who cannot be given appropriate care at home, but we quite agree with the complainant that it is neither consistent nor in good taste to have emissaries out proselyting for the hospitals, which supposedly are for teaching purposes and a part of the great medical center that eventually will constitute the medical department of the University. If any private hospital in the state of Indiana would send out such a bulletin as has been sent out repeatedly by the Indiana University Hospitals, every reputable physician would shun that hospital on the ground that the hospital was exploiting itself and through advertising considered in very bad taste.

AN interesting bit of logic is found in the report of the secretary (Emmett Keating, M.D.) of the Physicians Fellowship Club of Chicago, in which he says in part:

"The Physicians Fellowship Club was organized for the purpose of making impartial studies of the many

economic problems of interest to the scientific and social welfare of physicians. It deals with subjects that all physicians realize are of vital importance. But, while of importance, they are subjects about which only a tiny minority of physicians have even an elementary knowledge.

"We cannot be interested in, or reason intelligently about, things of which we know little or nothing. The school and hospital training of physicians has been entirely scientific. Medical schools and hospitals, so far as students and internes are concerned, are fifty years behind the times in their attitude, which assumes that the physicians of today can earn a living by depending upon acute diseases and obstetrics.

"This is entirely possible in the rural districts. If the young physician is willing to do his work cheerfully and resolutely in the most primitive surroundings; if he will realize that he can neither hope nor expect to do major surgery; if he can be big enough to dignify the seemingly trivial, and constantly keep in mind that if anything in his practice is to be considered more important than anything else, that thing is obstetrics; if he will make careful and detailed examinations and not make diagnoses based only upon his patients' symptoms, the country doctor will be a credit to the medical profession and a great man in his community. In the cities, with few exceptions, physicians cannot hope to achieve the financial success of the country doctor, because of the inroads of industrial medicine and the destructive force of organized charity.

"If the business of medicine were controlled by medical men whose knowledge of economics was sufficient to give them an understanding of basic principles of finance, and a knowledge of that other principle, that encouraging the supposed getting of something for nothing is morally wrong and inimical to the best ideals of government, our large cities would be a field of endeavor in which all physicians might expect a busy and lucrative practice from the start. People of moderate means could obtain the best medical service for a price within their income. The hopelessly and helplessly poor would be apportioned to the physicians in their neighborhood, whose every interest would be to give them thoughtful care and attention. Organized medicine should insist that medical care of those unable to pay must be paid for from the taxes levied on the community. When that is done, the unfortunates will be better served because physicians will be more painstaking in their ministrations."

RECENTLY THE JOURNAL was offered, without solicitation, a full page advertising contract for Lucky Strike cigarettes, the year's proceeds from which would amount to more than three hundred dollars. Some managers of medical journals may say, "That is just like stealing candy from a baby because it came so easy," when, as everyone knows, we struggle and put forth much effort in attempts to secure acceptable advertising. However, we refused the Lucky Strike advertising copy and refused the proffered contract, and we did not say, "Get thee behind me, Satan," when we did it. We have not taken this stand without due reflection, and a word of explanation concerning our conduct may not be amiss. In the first place, we have nothing against Lucky Strike cigarettes, and if the manufacturers can get any cold comfort out of it, we herewith announce that the editor has smoked them for years. In the second place, we have no objection to advertising cigarettes, baby buggies, golf balls or even step-ins if the editor thinks that physicians will be interested

in such wares. In the third place, we are not attempting to bring about any uncalled-for reform in advertising methods. We do, however, once and for all, object to carrying any advertising that is deceptive or misleading. Since the establishment of THE JOURNAL we have attempted to uphold a very high standard of ethics and propriety in the acceptance of advertising copy. We have done this not alone because we felt that it was in the interests of THE JOURNAL and its readers, but we also have done it because we felt that it was a matter of right. The advertising for Lucky Strike cigarettes is positively vicious in that it is deceptive and misleading. The lamentable feature of the whole thing is that deception and misrepresentation is not necessary to promote any article of merit, no matter whether it is cigarettes, or golf balls for the Hottentots. We are really sorry to reject the Lucky Strike advertising, and we would not reject it if the copy was acceptable. We are, however, despite the fact that we need the money, rejecting the Lucky Strike advertising as a matter of principle. We believe that the readers of THE JOURNAL individually and collectively will approve of our action.

MEDICAL arts buildings are a great success in most of the cities where they have been established, but we notice that nearly all of the most successful ones are owned and managed by laymen. Most of those that are owned and controlled by physicians are having a struggle for existence, and some of them are in financial difficulties. This is largely due to lack of business management as also to the well-known tendency of physicians to be jealous and suspicious of each other in business affairs. They seldom seem to agree upon a definite policy, or to realize the necessity of giving loyalty to something that out of sentiment or business connection ought to receive their support. They expect more concessions and more leniency extended to them in a business way from confreres than they ever would expect to receive from a layman who considers business from a business standpoint. In matters of business policy they seldom agree, and if anything goes wrong, even if it goes wrong as the result of lack of loyalty on the part of the physicians, someone has to be "the goat" and gets unnecessary and exceedingly unkind criticism and blame for the conditions. We are strong for medical arts buildings for medical offices and where medical affairs may be concentrated, but we also are strongly of the opinion that in the best interests of all concerned those enterprises will be most successful if largely owned and managed by lay persons of good business ability. For similar reasons we are opposed to an insurance company to be owned and managed by physicians with the object of furnishing complete malpractice defense to members of the medical profession. Such an enterprise not only will be

called upon to furnish defense but to pay judgments. The last named feature is the straw that would break the camel's back. No, physicians are not trained as business men, and few of them have even good horse sense when it comes to business management, so the best thing for a physician to do is to depend upon those with good business training. At least this has the virtue of giving greater opportunity for success in a business venture, and it does preclude much of the possibility of bad feeling among confreres brought about wholly unnecessarily and without consistency or reason.

SOME professional men have peculiar ideas concerning propriety, and adopt rather unique methods of advertising themselves. Occasionally a physician gets advertising and exploitation that he has not sought, but when he courts exploitation by newspapers the handwriting on the wall is so plain that all can interpret the meaning. Some of the physicians of Kokomo have sent us copies of the *Kokomo Dispatch* for January 13, 1929, containing an illustrated eulogistic exploiting article concerning the reputed skill, ingenuity and international fame secured by one of Kokomo's surgeons. We have no objections to offer when any physician displays so little common sense and good taste as to announce boldly in a full page advertisement of the photogravure section of any newspaper that he considers himself adequately prepared and sufficiently trained to do any branch of surgery, and we even will go a step further and say that if any newspaper is willing to defame its photogravure pages by printing a picture of the aforesaid advertising physician we will offer less criticism inwardly thought, as well as openly spoken, than we do when we see examples of sickening personal exploitation such as presented in the newspaper clippings that have come to our desk. We take off our hats in respect, adoration and praise for the physician who accomplishes something in this world for the benefit of suffering humanity, in the interests of science, and in the advancement of medical progress, but we have only pity for the physician who has the mistaken notion that his work will not be recognized unless he proclaims it from the housetops. As a final comment on this episode, we would like to inquire if medical ethics or even average propriety in the practice of medicine is a dead issue in Indiana. One of our correspondents once wrote us saying, "To hell with medical ethics. Most Indiana physicians don't know what the words mean." We never will have nor create respect for medical ethics until we begin penalizing and disciplining those members of the medical profession who flagrantly abuse all the rules of professional decency. You never will get anywhere by praying with them or for them. They are sinners beyond redemption unless they are purified by fire! Let us

exercise some of the old religious doctrines of punishment!

WE have maintained that much of the abuse of medical charity through services rendered by the State Laboratory was due entirely to the action of the secretary of the State Board of Health in both creating and tolerating practices that are nothing short of encouraging state medicine. In fact, we never have been able to read into the law some of the provisions that the secretary has been trying to make us believe were mandatory upon him. Now comes the attorney general with an opinion that sustains us in our contention, and he indicates that the law deals in generalities and does not point out specifically what and what not shall be done by the state laboratories. In fact, it would seem that under the law much latitude is given the secretary, and he seems to have taken advantage of that fact in introducing features that have been very obnoxious to a large percentage of the physicians of the state who have felt called upon to enter complaint, but without getting very far in the solution of the problem inasmuch as the secretary of the State Board of Health has had an alibi, and anyway was quite anxious to "pass the buck" in putting into effect a remedy.

When the secretary of the State Board of Health was in trouble a year or so ago, and political enemies almost got his scalp, we upheld him, and for the reason that we felt that his resignation was desired for no good reason, but we have no hesitancy in saying that we are opposed to his present attitude when he not only fails to meet the medical profession in correcting some obnoxious practices on the part of the State Board of Health, but arrogantly intimates, as he did to the editor of *THE JOURNAL*, that he didn't care what the medical men of the state thought about his conduct of the state laboratories, he would run them to suit himself. We have a very high regard for Dr. King's ability and business efficiency, but we do not approve of his attitude, which is antagonistic to cooperation with the medical profession of the state. The physicians of the state are intensely interested in public health matters, and are quite willing to support all of the reasonable efforts of the secretary of the State Board of Health in conducting the affairs of his office in a manner that is in the best interests of all concerned. However, the physicians of the state are not going to tolerate much longer the high-handed way in which the secretary has ignored their recommendations and protests concerning policies that are inimicable to the interests of the people as well as medical men.

DOCTOR HARRIS, in *American Medicine* for November, 1928, says that the American people are consuming too much sugar and not enough

vitamins. This is particularly true concerning children, who if fed too much sugar will not consume other foods containing the factors necessary for satisfactory nutrition. He especially points out the danger of too much sugar in infant feeding, and says that the sugar-fed child is more prone to disease than the one with the well-balanced diet. The remedy lies in the education of the laity as to too much sugar for the child as well as the adult, and he concludes in his statement, "a normal person from childhood to old age should drink from a pint to a quart of milk and eat one raw fruit, one raw vegetable and two cooked leafy green vegetables each day." In the same number of *American Medicine* (November, 1928) G. W. Kutscher, Jr., in discussing "Dietetic Management" says that it is folly to tell a mother that her child should have a well-balanced diet, inasmuch as malnutrition is not cured by diet alone. Two types of food must be cut out of the undernourished child's diet, sweets and fats. It should be borne in mind that nearly every malnourished child has a poor or finicky appetite. The following rules are given to re-establish normal appetite:

"1. Establish definite meal times—four or five a day, according to certain conditions to be considered later. 2. Make it an inviolable rule that nothing in the way of food is to be taken at any other time. 3. Eliminate all sweets from the diet—'added sweets' perhaps is a better way of putting it. This prohibition extends beyond the sugar-bowl on the table to candy, jams, jellies, molasses, honey and drug-store sweets. 4. Cut the butter down to a scanty portion and remove all cream from the milk. Next to excess sugar, fats are the most frequent cause of the lack of child's appetite. 5. Do not urge or even ask the child to eat this, that or the other thing. Say nothing more to the child than would be said to a casual guest at the table. Have the child remain at the table for twenty minutes, whether he eats or not, and then excuse him. Of course no desert is permitted unless he eats his 'plate clean.' The next step is to be certain that he gets nothing in the way of food between that meal and the next one. Persistence is obviously necessary, and in a short while the appetite will return. Firmness is also paramount. If the mother feels that she cannot carry out every rule to the letter, she had better not begin."

DEATHS

N. W. KING, M.D., of Taswell, died January 10th, aged seventy-four years.

HENRY R. CASEY, M.D., of Austin, died January 4th, aged eighty-two years. Doctor Casey was graduated from the Indiana Medical College, Indianapolis, in 1876.

M. W. WEBSTER, M.D., of South Whitley, died January 11th, aged seventy-seven years. Doctor Webster was graduated from Rush Medical College, Chicago, in 1882.

WILLIAM E. GEORGE, M.D., of Indianapolis, died December 28th, aged sixty-five years. Doctor George was graduated from the Chicago Homeopathic Medical College in 1889.

DAVIS W. TUCKER, M.D., of South Bend, died December 18th, aged sixty-four years. Doctor Tucker was graduated from the Kentucky School of Medicine, Louisville, in 1888.

THOMAS G. GREEN, M.D., of Shelbyville, died January 11th, aged sixty-three years. Doctor Green was graduated from the Kentucky School of Medicine, Louisville, in 1889.

WILLIAM F. RUST, M.D., of Indianapolis, died January 18th, aged sixty-four years. Doctor Rust was graduated from the Hospital College of Medicine, Louisville, Kentucky, in 1889.

JOHN MILTON RHODES, M.D., of Indianapolis, died December 28th, aged fifty-one years. Doctor Rhodes was graduated from the Marion-Sims College of Medicine, St. Louis, in 1899.

ULYSSES G. VANCE, of Waterloo, died January 12th, aged sixty-five years. Doctor Vance was graduated from the National University of Arts and Sciences, Medical Department, St. Louis, in 1898.

PATRICK W. CONWAY, M.D., of Delphi, died January 6th as the result of an automobile accident. Doctor Conway was seventy-six years of age. He was graduated from the Rush Medical College, Chicago, in 1880.

FRANK H. HURON, M.D., of Danville, died January 1st, aged eighty-eight years. Doctor Huron had retired from the active practice of medicine. He was graduated from the General Medical College, Chicago, in 1883.

JONAS S. COVERDALE, M.D., of Decatur, died December 31st, aged seventy-nine years. Doctor Coverdale had practiced medicine in Decatur for nearly fifty years. He was graduated from the Medical College of Fort Wayne in 1881.

ABNER H. SHAFFER, M.D., of Huntington, died January 8th, within a week of his one hundredth birthday. Death resulted from influenza and pneumonia. Doctor Shaffer served in the Civil war. He was graduated from the Western Reserve University School of Medicine at Cleveland, Ohio, in 1862.

ROBERT A. J. McKEAND, M.D., of Hanover, died December 26th, aged fifty-three years. Doctor McKeand was a member of the Jefferson County Medical Society, the Indiana State Medical Association and the American Medical Association. He was graduated from the Kentucky School of Medicine, Louisville, in 1904.

EARL J. CRIFE, M.D., of North Manchester, died December 29th, aged forty-eight years, following an illness of influenza. He was a member of the Wabash County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He was graduated from the Indiana University School of Medicine, Bloomington and Indianapolis, in 1910.

CHARLES E. REED, M.D., of Culver, died January 2nd, while visiting at Battle Creek, Michigan. Dr. Reed was medical officer at Culver Military Academy. He was fifty-nine years of age. He was a member of the Marshall County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Jefferson Medical College of Philadelphia in 1895.

DALTON WILSON, M.D., of Evansville, died January 3rd, at the Walker Hospital as the result of the explosion of a drum of ethylene gas. Dr. Wilson was fifty-six years of age. He was graduated from the Medical College of Indiana, Indianapolis, in 1897. He was a member of the Vanderburgh County Medical Society, the Indiana State Medical Association, a Fellow of the American Medical Association and a member of the Associated Anesthetists of the United States and Canada.

THOMAS C. HOOD, M.D., of Indianapolis, died January 2nd, aged sixty-eight years, following an illness from influenza. Doctor Hood was well known throughout Indiana, and had practiced in Indianapolis for more than thirty years. He was professor emeritus of ophthalmology of the Indiana University School of Medicine, and was a member of the American Academy of Ophthalmology and Otolaryngology, a Fellow of the American College of Surgeons, a member of the Indianapolis Medical Society, the Indiana State Medical Association and the American Medical Association. Doctor Hood was graduated from the Jefferson Medical College of Philadelphia in 1884.

NEWS NOTES AND PERSONALS

Anything in the line of physicians' supplies or equipment may be obtained from advertisers in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION. Patronize these advertisers, for it means a continuance of their advertising patronage, and the latter means a larger and better Journal for you.

MISS MARY LOUISE COX, of Bloomington, and

Dr. Charles E. Stouder, of Gosport, were married December 24, 1928.

DR. W. H. ARMISTEAD, of Indianapolis, and Mrs. Louise B. Cameron, of Nashville, Tennessee, were married December 29.

DR. CHESTER A. STAYTON, of Indianapolis, has announced the removal of his x-ray laboratory to 313 Hume-Mansur Building.

DR. GEORGE W. DEWEY, who for the past two years has been at Goodhue, Minnesota, has come to Lafayette to reside at the Indiana State Soldiers' Home.

THE January meeting of the Madison County Medical Society was held January 22, at the Hotel Stilwell, Anderson. Dr. Thurman B. Rice, of Indianapolis, presented a paper.

THE Muncie Academy of Medicine held its regular meeting at the Hotel Roberts, January 15th, when Dr. George E. McKean, of Detroit, presented a paper on "The Treatment of Pneumonia."

AT the meeting of the Miami County Medical Society held recently Dr. John E. Yarling, of Peru, was elected president, Dr. D. C. Ridenour vice-president, and Dr. J. P. Hahn secretary-treasurer.

MISS MILDRED JAQUITH, of Indianapolis, and Dr. Austin D. Sweet, of Martinsville, were married in Indianapolis, December 29, 1928. They are residing in Martinsville, where Dr. Sweet will practice medicine.

THE New Highland Sanitarium and clinic announce the opening of their new five-story fire-proof building on February 16th. Dr. Simon P. Scherer, medical director, invites members of the medical profession to come and see this institution.

DR. S. A. SHOEMAKER, of Bluffton, will leave soon for Florida, where he will open an office for the practice of medicine, specializing in eye, ear, nose and throat work. Dr. Shoemaker has practiced that specialty in Bluffton for fifteen years.

AT the annual dinner and business meeting of the Indianapolis Medical Society held January 8 at the Athenæum Dr. Murray N. Hadley was elected president, Dr. C. E. Cottingham vice-president, and Dr. Chester A. Stayton secretary-treasurer.

THE Tippecanoe County Medical Society held its regular meeting at the Lahr Hotel, January

10, 1929. Dr. W. F. McBride, of Dayton, Indiana, presented a paper, his subject being "Is the Country Physician Becoming a Thing of the Past?"

THE Wells County Medical Society held its regular meeting at Bluffton, December 11, 1928, when the following officers were elected for 1929: President, Dr. Louis Severin; vice-president, Dr. O. G. Hamilton; secretary-treasurer, Dr. Max W. Gitlin.

THE Northeastern Indiana Academy of Medicine held its regular meeting at the Gawthrop Hotel, Kendallville, January 31st. Dr. Cleon Nafe, of Indianapolis, presented a paper on "Ruptured Ectopic Pregnancy and Perforated Duodenal Ulcer."

THE regular monthly seminar of the Indiana University School of Medicine was held at the Medical School Building, Indianapolis, January 18th. Hospital cases were reported by Drs. Bedwell, Richardson, Clevenger and Garceau. Papers were presented by Drs. Badertscher and Turner.

THE U. S. Civil Service Commission announces open competitive examination for Dietitian (\$1,800 to \$2,100 per year), applications for which position must be on file with the Civil Service Commission at Washington, D. C., not later than July 1. Full information may be obtained from the U. S. Civil Service Commission.

FOR his work in an investigation of the ductless glands and particularly in his isolation of pituitary hormones, Dr. Oliver Kamm, director of chemical research of Parke, Davis & Company, has been awarded the \$1,000 prize by the American Association for the Advancement of Science for the "most noteworthy contribution to science presented at the annual meeting."

THE annual Congress on Medical Education, Medical Licensure and Hospital will be held in Chicago, February 18, 19 and 20, 1929, with headquarters at the Palmer House. Those intending to attend the congress will be assured reduced railway fares, and should buy one-way fares to Chicago and obtain a certificate receipt which will entitle them to a return ticket at half fare.

TWO weeks courses in laryngoscopy, bronchoscopy and esophagoscopy for specialists have been arranged to be given at the newly built and equipped Chevalier Jackson Bronchoscopic Clinic of the Graduate Hospital of the University of Pennsylvania. Complete information may be obtained by writing to the dean of the Graduate

School of Medicine, University of Pennsylvania, Philadelphia.

THE U. S. Civil Service Commission announces open competitive examination for physiotherapy assistant, applications for which must be on file with the commission at Washington, D. C., not later than May 7th. Examination is to fill vacancies in hospitals of the Veterans Bureau and Public Health Service. Full information may be obtained from the U. S. Civil Service Commission, Washington, D. C.

DR. A. WILLIAM LESCHIER has been appointed general manager of Parke, Davis & Company, according to an announcement made public on January 10th by Oscar W. Smith, president of the company. Dr. Leschier has been connected with the company for the past twenty years. Parke, Davis & Company also announce the appointment of Dr. Louis Klein as promotion manager and Ralph G. Sickels as advertising manager.

THE U. S. Civil Service Commission announces open competitive examination for Physiotherapy Aide, applications for which position must be on file not later than March 26 and May 7, 1929. For this position in the Public Health Service the Treasury Department wishes women; the Veterans' Bureau wishes both men and women. Complete information and application blanks may be secured from the U. S. Civil Service Commission at Washington, D. C.

THE third Albert J. Ochsner Memorial Lecture of the North Side Branch of the Chicago Medical Society will be given by George W. Crile, of Cleveland, February 21, 1929, at the Germania Club, Germania Place and Clark Street, Chicago. This lecture will be preceded by a banquet in honor of Malcolm LaSalle Harris, president-elect, and Frank Billings, Arthur Dean Bevan and William Allen Pusey, ex-presidents of the American Medical Association. Reservations may be made through communication with Miss Wolff, 25 East Washington street, Chicago.

THE untimely death of Dr. Dalton Wilson, of Evansville, as the result of an explosion, has cast considerable gloom over the physicians of that district. The exact cause of the explosion has not been definitely determined although a number of experts from the various nitrous oxide and ethylene factories investigated the matter. The explosion was terrific, pieces of the steel of the gas container and of Dr. Wilson's clothes and body being scattered about the little surgery and adjoining rooms. A large number of the windows in the clinic building and in the hospital were broken.

THE Indianapolis Medical Society held its regular weekly meeting January 15th at the Athenæum. Papers were presented by Dr. C. E. Orders, Dr. W. P. Morton, Dr. E. E. Padgett, Dr. W. P. Moenning, Dr. H. L. Norris, Dr. John E. Owen, Dr. Roy Myers, Dr. Arthur Mendenhall, Dr. F. V. Overman, and Dr. H. O. Mertz. At the dinner meeting held January 19th, in the Claypool Hotel, the auxiliary and other civic bodies met with the Indianapolis Medical Society in honor of John Kissinger, survivor of yellow fever experiments in Havana, Cuba. General M. W. Ireland, surgeon general of the U. S. Army, was the guest speaker.

THE next meeting of the American Association for the Study of Goiter will be held at Dayton, Ohio, March 25, 26 and 27. The Association was formed a number of years ago with the idea of bringing together each year men who will present the best that has been thought, said and done in the study of goiter and its associated problems. Members of state and provincial medical societies are eligible and invited to participate as attending members of the Dayton meeting. Headquarters will be at the Hotel Miami. All communications in regard to hotel reservations and information may be addressed to Dr. H. C. Haning, Reibold Building, Dayton, Ohio.

THE U. S. Civil Service Commission announces open competitive examination for the following positions: Occupational therapy aide (trades and industries); occupational therapy aide (gardening); occupational therapy aide (horticulture and floriculture); occupational therapy pupil aide (arts and crafts); occupational therapy pupil aide (trades and industries). Applications for these positions must be on file not later than June 29, 1929. Examination also will be given for graduate nurse; graduate nurse (visiting duty); and graduate nurse (junior grade), applications for which positions must be on file not later than June 29, 1929. Complete information concerning the above positions may be secured from the United States Civil Service Commission at Washington, D. C.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Ampules Dextrose, 20 cc.

Ampules Dextrose, 50 cc.

Tablets Cinchophen-Abbott, 5 grains.

Armour & Company:

Concentrated Liver Extract-Armour.

Eli Lilly & Company:

Ephedrine Hydrochloride-Lilly.

Pulvules Ephedrine Hydrochloride, $\frac{3}{8}$ grain.

Pulvules Ephedrine Hydrochloride, $\frac{3}{4}$ grain.

Solution Ephedrine Hydrochloride-Lilly, 3%.

MacDowell Bros.:

MacDowell's Wheat-Nut-Casein Dietetic Flour.

Merck & Co., Inc.:

Bromipin, 33 per cent.

H. K. Mulford Co.:

Pirquet Test for Tuberculosis (Bovine Type).

Tuberculin Ointment (Moro Ointment) (Bovine Type).

Tuberculin Intracutaneous (Bovine Type).

Antivenin (Bothropic).

National Drug Co.:

Diphtheria Antitoxin.

Normal Horse Serum.

Pertussis Vaccine.

Pneumococcus Vaccine.

Rabies Vaccine-Human (Semple Method).

Smallpox Vaccine.

Staphylococcus Vaccine.

Tetanus Antitoxin (Concentrated).

Typhoid-Paratyphoid Mixed Vaccine.

Typhoid Vaccine.

Antistreptococcic Serum.

Typhoid-Paratyphoid A Vaccine.

Parke, Davis & Co.:

Scarlet Fever Streptococcus Toxin for Preventive Immunization-P. D. & Co.

E. R. Squibb & Sons:

Sulpharsphenamine-Squibb, 0.9 Gm., Ampoules.

Tablets Ephedrine Hydrochloride-Squibb, $\frac{3}{8}$ grain.

Tablets Ephedrine Hydrochloride-Squibb, $\frac{3}{4}$ grain.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

December 31, 1928

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D. Chairman; M. N. Hadley, M.D., and Thomas Hendricks, executive secretary.

The minutes of the meeting held December 24 read and approved.

The release, "The Conquest of Disease," was approved by the Committee for publication on January 12.

Radio release entitled, "Diphtheria," was broadcast over station WFBM December 29, 1928.

The Committee discussed the outline for the five-year program of the Committee on the Cost of Medical Care. and the secretary was instructed to make a rough draft of the points covered in the discussion and send this draft to the chairman of the Committee for consideration and presentation at the next meeting of the Bureau of Publicity.

Suggestion was made that speakers from the various city, county and state institutions such as the City Board of Health, the Central Insane Hospital, etc., be given a place upon the radio program for medical talks over station WFBM as a part of the regular weekly programs sponsored by the Bureau of Publicity.

The following bill was approved for payment:

W. B. Saunders Co. \$7.50

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole January 7, 1929.

Respectfully submitted,

WM. N. WISHARD, M.D.

Chairman

THOMAS A. HENDRICKS

Secretary

January 7, 1929.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D. by proxy, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held December 31 read and approved.

Release approved upon banquet to be given by the Woman's Auxiliary to the Indianapolis Medical Society for John R. Kissinger of Huntington, hero of the yellow fever tests under Major Walter Reed in 1900.

Radio release broadcast over station WFBM January 5—"A Healthy Hoosier Winter." On January 12 a speaker from the Woman's Auxiliary will talk over station WFBM about Kissinger.

In accordance with the suggestion made at the last meeting that speakers from the various city, county and state institutions, such as the City Board of Health, Central Insane Hospital, etc., be given a place upon the radio program for medical talks over station WFBH, the following list was approved:

Secretary, Indianapolis City Board of Health.

Secretary, Indiana State Board of Health.

Superintendent, Indianapolis City Hospital.

Superintendent Central Hospital for the Insane.

Administrator, Indiana University Hospitals.

The following report on medical meeting was received: Jan. 3—Veedsburg, Ind. Fountain-Warren County Medical society. "Health Fads and Foolishness."

The report said, "The meeting was highly satisfactory on an important but rarely talked of subject. After the talk by the speaker so interested were the listeners in the subject that a two hours' discussion followed."

Handbook No. 4 entitled "Lay Health Agencies and the Physician," published by the Cattaraugus County Medical Society of Olean, New York, was received. The secretary of the Bureau was instructed to write the secretary of the Cattaraugus County Medical Society thanking him for the pamphlet which discusses the relations between the Cattaraugus County Medical Society and the Milbank Demonstration. The cover page of this handbook states, "This demonstration has demonstrated that wherever lay bodies attempt to interfere with and guide official health work the result is inefficiency and chaos."

The secretary was instructed to get in touch with the new member of the committee and find out what would be a convenient time for weekly Bureau meetings.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole January 14, 1929.

Respectfully submitted,

WM. N. WISHARD, M.D.

Chairman

THOMAS A. HENDRICKS

Secretary

January 18, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; Chas. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held January 7 read, corrected and approved.

The release for Saturday, January 26, corrected and approved.

January 26—"Sleeping Sickness."

February 2—Talk by Superintendent of Indianapolis City Hospital.

Clipping referred to Bureau concerning newspaper advertising by physician of Howard county. Clipping referred to the councilor of the Eleventh District with comment that he take any action that he sees fit.

Announcement by the secretary of the meetings of the Delaware-Blackford County Medical Society received by the Bureau. The Bureau especially wished to commend the fine way the announcement is made, and especially the following excerpt:

"If there were no local, state and national medical organizations:

"What would be the legal status of medical practice?"

"What health laws would be on the statute books?"

"What kind of medical schools would we have?"

"What type of medical meetings would be held?"

"What type of medical literature would be published?"

"What understanding would there be among physicians?"

"What kind of a doctor would you be?"

Clipping from *The Indianapolis Times* quoting the secretary of the Indianapolis City Board of Health as follows was reviewed by the Bureau:

"The idea of community clinics is rather new and an innovation in a way. Unquestionably, the establishment of free community clinics, making available the expert services to all classes, would aid very much in getting a higher percentage of the population to subject themselves to regular physical examinations. The idea of a nominal charge would appeal to the class unable to employ private physicians."

Clipping referred to editor of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

Data concerning the five-year survey of the Committee on the Cost of Medical Care referred to the new member of the Bureau for report at the next meeting.

The following letter received from librarian, Indiana University School of Medicine:

"Thank you for the list of medical books for sale by Anderson, of San Francisco. It happened that he sent us a copy of the list, and we bought about twenty-five volumes from it, which are now on our shelves. We appreciate your sending the list, nevertheless."

The following report upon medical meeting received:

January 3—Veedsburg, Ind. Fountain-Warren County Medical Society. "Health Fads and Foolishness."

The following bill was approved for payment:

Thurman B. Rice, M.D. \$6.00

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole January 25, 1929.

WILLIAM N. WISHARD, M.D.

Chairman.

THOMAS A. HENDRICKS

Secretary.

WOMAN'S AUXILIARY TO THE INDIANAPOLIS MEDICAL SOCIETY

It is but fitting that THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION record the program offered by the Woman's Auxiliary to the Indianapolis Medical Society, January 19th. The idea for this meeting originated in the mind of the president, Mrs. David Ross, who was assisted by a corps of members, including Mrs. Charles McNaull, chairman of the program committee. Furthermore, the Auxiliary received cooperation from various organizations, assuring success. The sponsors were the Indianapolis Medical Society, Indiana State Medical Association, Indiana State Board of Health, Indianapolis City Board of Health, Indiana State Historical Commission, Medical Corps of U. S. Army at Ft. Benjamin Harrison, Eli Lilly and Company, Pittman-Moore Company, Swan-Myers Company, Hoosier Phar-

The following radio releases were arranged for:
January 19—"The Conquest of Disease."
maceutical Company, Indiana Academy of Science, Department of Conservation of Indiana, Indiana Branch of the Bacteriological Society and the Chamber of Commerce.

This program, a dinner meeting, was in honor of Private John R. Kissinger, a hero of a scientific research experiment in yellow fever in Cuba in 1900, under Major Walter Reed, M.C., U.S.A. The address of the evening by Surgeon-General Merritt W. Ireland, was "The Havana Experiment" in comprehensive form, lauding "the men who submitted to those deadly tests"; he said "rightfully may they be listed among the world's greatest martyrs."

Mrs. McNaull gave to Mr. Kissinger a beautiful testimonial in the name of the cooperating organization, parts of which read as follows: "You have in the noble generosity of your heart and life shown the fine ardor of which the spirit of man is capable. In the rich glow of this experience mankind is glorified. Greater love has no man than this. It is but fitting that we as a state should pause in the beginning of our new year to give you this tribute—to recognize the service you have rendered the race, to be not unmindful of what it meant to you to undergo the indignity of disease, of the pain and distresses of those dark and uncertain hours of illness, of the weakness and weariness of convalescence, of the long years of impaired health which your history shows you endured with the same lack of self-seeking and self-consideration that has marked your eminently worthy life. It is but fitting that you should receive this tribute as a symbol of the fruits of your endeavor, and as a surety that your name and your fame will live secure in the hearts of your fellowmen. Your deed has shed a luster upon your time and country that shall not pass away."

Others on this program were Rev. Lewis Brown, who delivered the invocation; Mrs. David Ross who gave the introduction; Dr. Larue D. Carter, who responded and acted as toastmaster; Mayor L. Ert Slack who welcomed the guests; Dr. William F. King, who spoke of "The Havana Experiment from a Public Health Standpoint" and Miss Fannie Kiser, harpist. Mention also should be made of the bugler from Fort Benjamin Harrison, who sounded "mess", and the Major Harold C. McGrew Camp No. 1. United Spanish War Veterans, who provided flags for decorations, and presented Mr. Kissinger with a basket of flowers.

Mr. Kissinger's own tribute to the officers who conducted these experiments is worthy of preservation, "After having seen those brave officers submitting to what looked like certain death in combating the disease, I thought it a high honor to have a small part in fighting it." When Mrs. Kissinger was introduced many throats grew tight, for all knew her devotion to her husband during those years when he was the victim of paralysis of the legs and was forced to crawl about his home on leather pads.

This tribute to a hero of preventive medicine establishes a precedent in the Woman's Auxiliary to the American Medical Association. It is in perfect accord with the advice of Dr. William D. Haggard, in an address to the Auxiliary at Atlantic City: "The commercial world, with its department store business ideas, cannot appreciate the altruism of the physician in cutting off their source of revenue by preventive medicine, doing for generations yet unborn a service almost sublime." It is for the women of the A. M. A. to enlighten their friends concerning this service. Let the women of the Auxiliary learn to sing the praises of the heroes of medicine!

Finally, this program should bring to the attention of officers of county medical societies that at their command is a splendid body of women, eager and ready to assist in their endeavors; their usefulness depends largely upon recognition of them and a disposition to help shape their destinies.

MRS. F. W. C.

WOMAN'S AUXILIARY TO THE VIGO COUNTY MEDICAL SOCIETY

Terre Haute, Ind.

Our November meeting was held on the afternoon of the fifth at the Y. W. C. A. Miss Lucia Brokaw, of the Public Health Nursing Association, was our guest and told us many interesting things about the work of the Association. The afternoon was spent in making dressings and rolling bandages at her direction, after which tea was served.

On December 7 a dinner meeting was held to which the physicians' invited their wives. This took place at St. Stephen's Parish house and Dr. A. E. Sterne, of Indianapolis, was the speaker. He gave a most instructive talk on "Crime and Heredity."

On January 8 the ladies held a dinner meeting at the Elk's club when the following officers were elected: Mrs. C. L. LaBier, president; Mrs. B. M. Hutchings, first vice-president; Mrs. W. G. Crawford, second vice-president; Mrs. C. W. Asbury, third vice-president; Mrs. F. E. Sayers, fourth vice-president; Mrs. E. T. Zaring, secretary; and Mrs. A. W. Mitchell, treasurer. After the business meeting delightful bridge games were enjoyed and very attractive prizes given.

Our meetings all have been well attended and the president greatly appreciates the splendid co-operation of all of the committees.

Respectfully submitted,

MRS. O. O. ALEXANDER
Retiring President

VANDERBURGH COUNTY WOMAN'S AUXILIARY

By the invitation of the Vanderburgh County Medical Society, forty of the wives of the members held a luncheon meeting, January 23d, at the Y. W. C. A. Following an explanation by the state president, Mrs. W. R. Davidson, as to its origin and aims, a Woman's Auxiliary to the County Medical Society was organized with the following officers: President, Mrs. H. C. Ruddick; vice-president, Mrs. Robert W. Viehe; second vice-president, Mrs. Paul V. Lynch; secretary, Mrs. Clarence Baker; corresponding secretary, Mrs. Arleigh E. Allenbaugh; treasurer, Mrs. Bernard D. Ravdin.

At the next meeting, the constitution and by-laws will be adopted, and plans made for monthly programs.

Respectfully submitted,

MRS. W. R. DAVIDSON.

VANDERBURGH COUNTY MEDICAL SOCIETY

The January meeting of the Vanderburgh County Medical Society was held at the Welborn Hospital Clinic, Evansville, Tuesday, January 8, at 8:00 p. m.

The following program was presented by the staff of the Welborn Hospital Clinic:

Memorial Address for Dr. Dalton Wilson—Dr. M. Ravdin.

"Causes of Explosion which Resulted in the Accidental Death of Dr. Dalton Wilson"—Dr. J. Y. Welborn
"Diagnosis and Treatment of Infection of the Hand"—moving picture.

An invitation is to be extended to the wives of the physicians to organize a Woman's Auxiliary of the Vanderburgh County Medical Society. Mrs. W. R. Davidson, of this city, is the state president of this organization at the present time.

Dr. W. C. Dyer reported that the stock for the Physicians' Business Bureau had been nearly sold, and that articles of incorporation were to be drawn up this month. Dr. J. Y. Welborn, Dr. M. Ravdin, and Dr. W. E. McCool were to sign the papers of incorporation.

Dr. H. C. Ruddick, president of the society, appointed the following physicians on the general committee in charge of arrangements for the State Medical Meeting to be held here in September: Dr. H. C. Ruddick, chairman; Dr. J. C. McClurkin, Dr. J. Y. Welborn, Dr. Keith

T. Meyer, Dr. P. MacKenzie, Dr. A. M. Hayden, Dr. W. E. Barnes, Dr. D. G. Tweedall, Dr. Chas. G. Sutter
A meeting of this committee is to be held Monday evening, January 14.

Respectfully submitted,

KEITH T. MEYER, M.D.
Secretary

MADISON COUNTY MEDICAL SOCIETY

Members of the Madison County Medical Society held a banquet January 22, 1928, at the Hotel Stilwell and after a short business session, in which officers were elected for the coming year, an address was given by Dr. Thurman B. Rice, professor of bacteriology at the Indiana University School of Medicine, who spoke on "Bacteriophage."

Officers elected for the year are:

Dr. S. P. Stottlmyer, Anderson, president. Dr. Charles Morris, Anderson, vice-president. Dr. M. A. Austin, Anderson, secretary-treasurer. Dr. Seth Irwin, Summitville, censor.

Twenty-five physicians were present from Anderson, Elwood, Lapel and Summitville.

Several committees were appointed to draft resolutions of importance to the society. The organization went on record that the present law concerning the treatment of hydrophobia cases at Indianapolis is an injustice to the tax payers.

The physicians contend that the patients could be just as satisfactorily treated and at less expense in their own homes. It was shown that when the present law was passed several years ago, the treatment was not perfected to the extent where it could be given at any place except by specially prepared institutions. In the last two years the serum has been developed from an unstable to a stable preparation and it now can be shipped to any physician and used as a simple hypodermic treatment.

Dr. Rice gave an interesting and instructive address on the history and development of "Bacteriophage," a recent discovery first announced by Dr. Duvall, a Paris physician and bacteriologist who since has come to America and now is professor of bacteriology at Yale University.

For his discovery of Bacteriophage Dr. Duvall was awarded a gold medal as having given to the world the most outstanding development in bacteriology in the past ten years. This award is made only once in ten years and only four other men have been so honored.

Just what bacteriophage is, is still a matter for debate, the speaker said. However, it is a substance which actually destroys bacteria and is so powerful in its action that one part in a billion is effective in sterilizing and destroying certain types of germs. Unfortunately this substance is specific in its action only against a few bacteria, Dr. Rice said, but this selective action is expected to be found effective in many other infections when further research shows whether bacteriophage is an ultra-microscopic bacteria or an enzyme ferment.

"Each bacterium probably will be found to have a specific bacteriophage which will cause its own destruction," he continued. "In fact, the commonest form of action of the substance is shown at present in the liquification of sewage in cesspools and the first bacteriophage was isolated from sewage in which was found the colon bacillus and typhoid organisms were destroyed."

Dr. Rice reported the use of bacteriophage in 200 hopeless cases at the Indiana University hospital at Indianapolis, with apparently miraculous recoveries in 40 per cent of the cases. In no case, he said, was bacteriophage used until all other methods proved failures.

The speaker said that recently one Indianapolis laboratory has put a bacteriophage on the market which is shown to be a specific treatment for three classes of commoner bacteria causing boils, carbuncles and skin ab-

scesses and other infections due to contamination with colon bacilli.

Dr. Rice gave one of the most interesting addresses ever given before the local medical society. He is spending the greater portion of his time in furthering investigation of this unknown substance.

Respectfully,

M. A. AUSTIN, M.D.
Secretary

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society met Tuesday, January 22, 1929, at the Public Library in South Bend at 8:30 p. m.

The meeting was called to order by the president, Dr. A. D. Huffman. After a brief business meeting, the paper of the evening, "Influenza—a Discussion of the Types Found in the Present Epidemic," by Dr. G. J. Geisler, was read. Doctor Geisler, from the clinical pictures of the cases he had seen, divided them into two types, the simple and pneumonic. Under the simple type he placed the bronchial, the gastro-intestinal, the nervous, and afebrile, giving the symptoms of each, the duration, prognosis and recovery, stressing the prostration and loss of weight which followed in every case. Under the pneumonic type (the acute fulminating was invariably fatal), he described the onset, involvement of the lung—cyanosis—with pulse remaining good until just before death. No cases of acute fulminating type were seen during present epidemic.

In conclusion Doctor Geisler compared the previous epidemics of 1918, 1920, bringing out the distinctive features and differences of each epidemic.

The discussion was led by Dr. Sensenich, followed by Dr. Cooper, both of whom had had personal experiences with influenza besides passing through the epidemic of 1918 in the army camps. Dr. Sensenich stated that the 2,600 pneumonic cases out of 12,000 total cases in the camp were divided into groups of 100 and different treatment of each group carried out in the hope of obtaining knowledge of the best treatment. In the final analysis it was found that no one group did better than another, regardless of treatment.

A general discussion by Doctors Bosenbury, Traver, Marcus Lyon, McMeel, Mitchell, Carter and Allen followed, stressing the lack of fatalities and mastoid involvements in the present epidemic and always in every case presence of great prostration and loss of weight.

The meeting adjourned at 10:15, followed by light refreshments.

MARTHA BREWER LYON,
Assistant Secretary and Treasurer.

CORRESPONDENCE

WORLD WAR RECORDS DESIRED

January 12, 1929

Editor THE JOURNAL:

Will you kindly grant space in THE JOURNAL for a questionnaire to elicit the records of service of medical men of Indiana in the World war? This is for the purpose of publishing a history, as authorized by Medical Service men who responded to a call for a luncheon meeting at the Annual Session at Gary. I was chosen as permanent historian, and if a reliable and complete history is produced—and no other kind is of much value—it will be necessary to have the prompt co-operation of the officers of each county medical society, and especially of each medical man who served in the war. Kindly send the following information direct to me:

Full name and address.

Date and place of birth.

Parentage.

Family.

Schools attended and degrees.

Dates of entry and discharge from service.

Outfit or outfits, rank-promotion.

History of service.

Any other items of personal or historic interest, before, during or after the war, by self, organization, or community, including honors—military, civic or professional.

American Legion and like activities.

Any information concerning anyone now moved from the state or dead who served in the war in any capacity, who were or are now in the medical profession.

Photographs.

This material, *if everyone does his bit*, will be a valuable contribution to the Medical History of Indiana.

Sincerely,

WHITEFIELD BOWERS, M.D.
816 Franklin St.,
Michigan City, Ind.

NO FUNDS FOR MEDICAL AND SURGICAL CARE OF THE INDIGENT

Crawfordsville, Indiana, January 26, 1929.

Editor THE JOURNAL:

About two months ago a small boy playing "Indian" had an arrow shot through his eyeball. I was called, dressed the eye, and, realizing the impossibility of preserving the eyeball, I advised enucleation, but his parents, being extremely poor, could not afford it. I agreed to perform the operation free of charge if the parents could manage in some way to meet the hospital expenses. They were unable to pay anything toward hospitalization. I then referred the parents to the county judge, and he informed them as well as me that it was impossible for him to do anything legal, but that he would see the commissioners, which he did, and they in turn said there was no law that would allow them either to compensate a physician or pay for hospitalization, but they would refer the matter to the Trustees of the Poor. The latter said they could not do anything except to send the child to the Riley Hospital in Indianapolis, even though I had agreed to render my professional services free. I learned upon investigation that it was determined that it would cost the county between \$75 and \$100 to send the patient to the Riley Hospital in Indianapolis, and that such expense would be in addition to the expense of railroad fare for the patient and someone to take him to Indianapolis. Inasmuch as the uninjured eye seemed to be acting in sympathy with the afflicted eye, I realized that dilatory tactics would very likely leave the child blind if something were not done promptly. To meet the emergency, friends raised \$35 to pay hospital expenses. The fact that there was no provision for taking care of such cases without seeking private donations is a reflection upon the community in not recognizing its duty to the sick and suffering.

Respectfully,

WARDLAW EWELL, M.D.

(Editor's Comment: We recognize the contention that every community should provide medical and surgical services and hospital care for its indigent and that this should be done by public taxation. However, in the instance cited we fail to understand why, if the attending physician was rendering his services gratuitously, there should have been any need for the expense of \$35. In the first place, an enucleation does not necessarily require hospital attention, and, furthermore, the ordinary enucleation case, even if in a hospital, usually is confined from two to three days at the most. So far as the surgeon's attendance is concerned, it is practically nil after the operation is performed. We are not objecting to a \$35 fee or more for the attending physician, for we believe that he deserves to be paid for his services by the community or someone, whether the patient is able to pay or not, but he already has stated that his services were gratuitous, so we think there must have been some sort of riotous extravagance in order to run up \$35 expense for hospital and after-attention.)

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

SYRUP EPHEDRINE HYDROCHLORIDE (DOUBLE STRENGTH)-SWAN-MYERS.—It contains ephedrine hydrochloride-Swan-Myers (New and Nonofficial Remedies, 1928, p. 176) 0.4390 Gm., in 100 cc. (¼ grain per fluid drachm) and alcohol 12 per cent. Swan-Myers Co., Indianapolis.

SQUIBB'S MINT-FLAVORED COD LIVER OIL.—Cod liver oil-Squibb (New and Nonofficial Remedies, 1928, p. 253) containing 0.67 per cent of oil of spearmint as flavoring. E. R. Squibb & Sons, New York.

TETANUS ANTITOXIN (BOVINE).—A tetanus antitoxin, concentrated (New and Nonofficial Remedies, 1928, p. 357) derived from the blood serum of cattle immunized against the toxin of *B. tetani*. Marketed in packages of one syringe containing 1,500 units (one immunizing dose). H. K. Mulford Co., Philadelphia.

CAPSULES OVARIAN SUBSTANCE DESICCATED.-P., D. & Co., 5 GRAINS.—Each capsule contains five grains of ovarian substance, desiccated-P., D. & Co. (New and Nonofficial Remedies, 1928, p. 290). Parke, Davis & Co., Detroit.

TABLETS WHOLE OVARY-LEDERLE, 2½ GRAINS.—Each tablet contains 2½ grains of whole ovary-Lederle (New and Nonofficial Remedies, 1928, p. 292). Lederle Antitoxin Laboratories, New York.

RABIES VACCINE-GILLILAND (SEMPLE METHOD).—An antirabic vaccine (New and Nonofficial Remedies, 1928, p. 363) prepared according to the general method of David Semple (phenol killed). Marketed in packages of fourteen syringes each containing 2 cc. The Gilliland Laboratories, Inc., Marietta, Pa.

ANTIPNEUMOCOCCIC SERUM. TYPE I.—This antipneumococcus serum (New and Nonofficial Remedies, 1928, p. 361) is also marketed in packages of one 50 cc. gravity container. E. R. Squibb & Sons, New York.

ANTISTREPTOCOCCIC SERUM-SQUIBB.—This antistreptococcus serum (New and Nonofficial Remedies, 1928, p. 362) is also marketed in packages of one 50 cc. gravity container. E. R. Squibb & Sons, New York. (Jour. A. M. A., December 8, 1928, p. 1805).

SALYRGAN.—MERSALYL. — SODIUM [o-(hydroxymercuric-methoxy-propylcarbamy) phenoxy] acetate.—Salyrgan contains 39.6 per cent of mercury in nonionizable form. Salyrgan has been demonstrated to exert a destructive action on the spirochete of syphilis in rabbits, but is used chiefly as a diuretic. It induces diuresis only provided sufficient renal tissue is still intact and is therefore contraindicated in acute diseases of the kidney as well as in advanced nephritis. It is effective in ascites and edema of cardiac and cardiorenal origin; also in ascites resulting from cirrhosis of the liver. Salyrgan is supplied only in the form of a 10 per cent solution in ampules of 1 cc. and 2 cc. H. A. Metz Laboratories, Inc., New York.

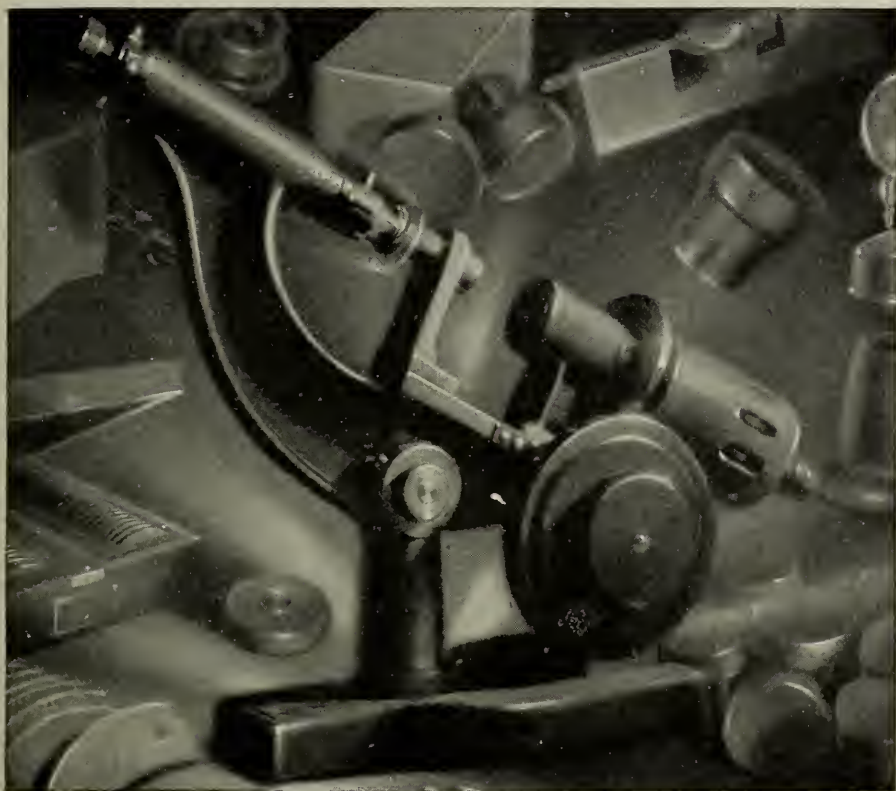
BROMIPIN 33 PER CENT.—BROMINIZED SESAME OIL 33 PER CENT-MERCK.—A bromine addition product of sesame oil, containing from 31 to 35 per cent of bromide in organic combination. It acts like the inorganic bromides. The combination is not broken up in the stomach; but a portion of the bromine is split off in the intestine; the remaining compound is readily absorbed and largely deposited in the tissues where it is slowly split up. The product is also used as a contrast medium for roentgen diagnosis of the tracheobronchial tree. It is stated to be applicable in cases of mild or medium tuberculosis in which the use of an iodized oil is contraindicated. Merck & Co., Inc., Rahway, N. J. (Journal of the A. M. A., December 22, 1928, p. 1995.)

PROPAGANDA FOR REFORM

IODIDE AND HEALTH.—The extensive use of iodine in the prophylaxis of goiter has focused attention on the possible physiologic consequences of prolonged administration of this element. Hanzlik and his co-workers have

(Continued on Adv. Page xx)

O to CULISTS



TILLYER LENS PRECISION requires prescription shop methods of higher standards than any other ophthalmic lens made and marketed on a commercial basis. This illustration shows the variety of equipment in every Tillyer prescription shop. It makes clear to you why Tillyers are the *most* accurate. Obviously, the more precisely your prescription is filled, the more comfortable the vision. Whenever you prescribe Tillyer Lenses, consider the extreme care with which these lenses are made.



AMERICAN OPTICAL COMPANY

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Accurate to the very edge

ABSTRACTS

(Continued from page 88)

made observation on rats. To an otherwise adequate ration, sodium iodide was added in amounts that corresponded to 3.3 mg. daily per kilogram throughout the major part of the life of the rats. This dosage would correspond to about 0.23 Gm. daily for an adult of 70 Kg. It was found that the continued administration of iodide in small daily doses in foods over long periods caused moderate though variable increases in weight and growth of the body in the majority of animals. The same tendency was indicated in rats on a deficiency diet. In contrast to the results obtained with iodide were those with sulphocyanate, bromide, arsenic, thallium and manganese. From these experiments there is no reason to believe that the prolonged use of iodide in small doses under ordinary conditions is detrimental. Hanzlik warns, however, that this would not apply to the continued use of iodide in specific conditions of the thyroid, or to large doses of the drug. (*Journal of A. M. A.*, December 1, 1928, p. 1720.)

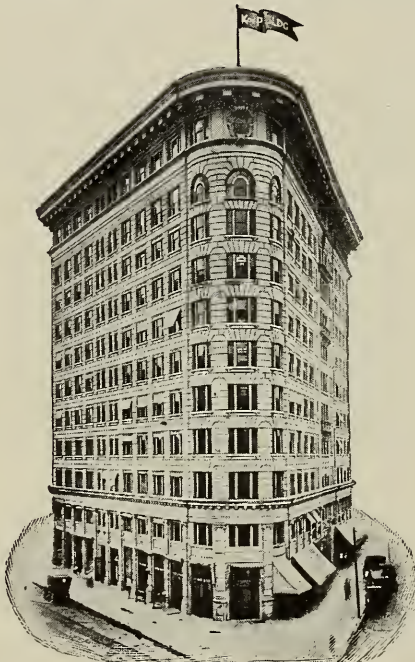
PFUNDER'S STOMACH TABLETS.—Frederick H. Pfunder, Ph. G., of Minneapolis, sells a "patent medicine" that he calls "Pfunder's Stomach Tablets, A Remedy for Ulcers of the Stomach." The A. M. A. Chemical Laboratory analyzed the preparation. It reports that from the result of its analysis it may be calculated that Pfunder's Stomach Tablets contains as essential ingredients: Bismuth subnitrate, U. S. P., 30.5 per cent; magnesium oxide, U. S. P., 22.8 per cent; sodium bicarbonate, U. S. P., 24.4 per cent. (*Journal of the A. M. A.*, December 1, 1928, p. 1736.)

THE HAZEN A. HORTON FRAUD.—Hazen A. Horton of Marshall, Michigan, has been quacking it for many years, using the United States mails as the intermediary

for his operations. The Solicitor for the Post Office department found that the representations made by Horton, to the effect that, when used as directed, Kori and Nervo will cure kidney, bladder, prostate and nervous disorders, that they will purify and enrich the blood and restore lost health, strength and vitality, and that the New Day Improved Appliance, by exercising an elastic pressure on the spermatic cord, will cause the testes to receive an increased blood supply, get better nourishment and produce a greater quantity of hormones, thereby restoring lost manhood and rejuvenating the body in general "without an operation" were false and fraudulent. The mails were closed to Hazen A. Horton. (*Journal of A. M. A.*, December 8, 1928, p. 1824.)

HEALTH APPEAL.—The advertising writers of our progressive land have found the word "IT" in their profession means "Health Appeal". A cursory inspection of current periodicals indicates no lessening of the attention to the health angle. The folly of the all-or-nothing policy in foods, the ridiculousness of some of the arguments as to vitamin content, the preposterous claims for glorified antiseptics, the cautious venturings of time-tried tonics into the public field, and the dazzling claims of the promoters of light arouse the risibilities of the physician by their startling inconsistencies if not by their exaggerations. Who would have thought ten years ago that cigarets would be sold to the American public by insistence on the healthful qualities of certain brands? The manufacturers of Lucky Strike cigarets are promulgating a campaign in which they assert that these cigarets do not cut the wind or impair the physical condition, and that "Lucky Strike satisfies the longing for things that make you fat without interfering with a normal appetite for healthful foods." The human appetite is a delicate mechanism and the attempt to urge that it be aborted or destroyed by the regular use of tobacco is essentially vicious. (*Journal of the A. M. A.*, December 8, 1928, p. 1806.)

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THE JOURNAL

OF THE

INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, B.S., M.D., Editor and Manager

OFFICE OF PUBLICATION: 406 West Berry Street, FORT WAYNE, INDIANA

VOLUME XXII

MARCH, 1929

NUMBER 3

ORIGINAL ARTICLES

PUERPERAL SEPSIS*

PALMER FINDLEY, M.D.
OMAHA, NEBRASKA

I am well aware that I am presenting to you a somewhat hackneyed subject, but it is one that must challenge your attention until there is unmistakable evidence that the profession is mindful of the seriousness of the problem.

The devastating scourges of puerperal sepsis that once existed in our institutions and in private practice will never return to plague us, but we are still confronted with the fact that puerperal sepsis does exist and to a degree that is nothing short of a reproach to the medical profession. This is so because it is a preventable disease and to a very large degree is due to ignorance, indifference and meddlesome interference.

The maternal morbidity and mortality in the United States is the highest of the twenty-one leading nations of the world and there has been no improvement in the past fifteen years. This is so largely because our medical schools and our hospitals are not providing adequate clinical instruction for our students. It is true that there are some notable exceptions, but they are few in number.

The Committee on Maternal Welfare sent a questionnaire to general practitioners over the country and report that the services of the family physician are proportioned about as follows: Fifty percent in general medicine, thirty-five percent in obstetrics, and only fifteen percent in minor surgery, fractures, life insurance, etc. And yet the curricula of our medical schools give to general surgery, exclusive of the surgical specialties, four and one-half times as many hours as to obstetrics. Much of the hours devoted to surgery are utterly wasted in the operating amphitheatres, whereas the teaching of obstetrics is largely theoretical. In the effort to provide clinical instruction in obstetrics students are sent into the homes of the poor, often unattended by an experienced obstetrician. In so doing the student

is enabled to report the required number of deliveries, but with little gained save possibly some bad habits. The out-patient department at best is no substitute for the maternity and it is in this respect that the teaching of obstetrics in the United States falls short of that in European countries.

I recently made a world-wide survey of the teaching facilities in obstetrics and without a single exception the students in all countries, save that of the United States, are required to devote a certain number of weeks or months in maternity institutions; living and breathing the atmosphere of the institution; delivering normal cases under the guidance of trained instructors, assisting in complicated cases and attending the prenatal clinic. Very few of our institutions are so equipped and with the result that the majority of our students are graduating and interning without adequate training in clinical obstetrics. The need is for more and better training of our medical students and internes in clinical obstetrics.

But it is contended that our medical students are over-crowded in their work and that the number of academic hours should be lessened. I quite agree. But I contend that adequate clinical facilities in obstetrics should be provided and, if need be, at the expense of surgery and the minor specialties; that the curriculum should be so ordered that students may be assigned to the maternity for such time as will permit of adequate training without an added burden to the already over-worked students. It can be done by devoting less time to theoretical teaching of all subjects, by laying less stress upon the minor specialties and by relegating much of clinical surgery to graduate years. Full half of maternal morbidity and mortality is due to puerperal sepsis. We are presenting a sad spectacle before the world in maintaining so high a death rate from a preventable disease. There is little prospect of improving our record unless we improve our educational facilities along practical lines.

The American Association of Obstetricians, Gynecologists and Abdominal Surgeons has petitioned the Council of Medical Education of the

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American Medical Association and the American Association of Medical Colleges to grant equal clinical instruction to obstetrics as to general surgery. William Sinclair, of London, once said, "Students are taught surgery which they will never practice and later practice midwifery which they were never taught." The demands upon the physician in the practice of obstetrics are at times such as to admit of no shifting of responsibilities. He is alone with his problem and must fight alone. To meet the demands often forced upon him he must possess accurate and precise knowledge coupled with skill bred of clinical experience. We will reduce the maternal morbidity and mortality so largely contributed to by puerperal sepsis only by improving and increasing our clinical facilities and instruction. It is a problem that lies at the door of our medical colleges.

Having relieved myself and burdened you with this diatribe against existing conditions in American obstetrics, let us consider briefly some of the problems involved in puerperal sepsis. The slides which I have thrown upon the screen graphically reveal the essential etiological factors, the portals of invasion, and the avenues of spread. More than this, they have demonstrated that there exists in the tissues of the body a biologic defense. The first line of defense is seen in the desidua in the form of a round cell infiltration. These are phagocytic cells which have the power of destroying the attacking organisms. In the milder forms of infection the first line of defense is adequate to withstand the attack providing the attending physician does not break down the defense by the use of the curet. The second line of defense is seen in the uterine musculature and is likewise composed of phagocytic cells similar to those in the first line of defense. Where the first line has failed to resist the invading organisms we find the myometrium permeated with these cells and if for reason of great virulence of the attacking organisms the second line of defense is inadequate, then the third line of defense comes into play. This is found in the connective tissue spaces of the broad ligaments.

Prof. Hofbauer, of Johns Hopkins University, has demonstrated the presence of certain specific cell elements in the connective tissue at the base of the broad ligaments. He finds them there in the early weeks of pregnancy and increasing in numbers as pregnancy advances. In event of infection following labor they are enormously increased in numbers. Should this line of defense fail to check the invading host of microorganisms there is a fourth line of defense—the reticulo-endothelial system; and finally the chemical and biological defenses in the blood, which may be termed the fifth and last line of defense.

We have no means of estimating the power of these defenses and we can do little to reinforce

them. But we can respect them by staying the hand that would destroy them. It is a matter of common observation that seldom does puerperal infection end fatally where there has been no unwarranted destruction of nature's defense mechanism by the use of the curet and other equally vicious manipulations. Hofbauer is experimenting with chemicals in his endeavor to stimulate the development of phagocytic cells in the pelvis, but as yet without results. Efforts have been made to increase the leucocytic content of the blood and with some success. There have been many attempts made to inject into the blood bacteriocidal chemicals, but with little or no success.

What methods may we adopt, in the management of puerperal sepsis, that will have the merit of doing no harm and the promise of reinforcing nature's efforts in combatting invading microorganisms? Experience has taught the obstetrician his limitations and there are limitations beyond which he must not go. He will not invade the uterine cavity save for the removal of retained secundines and then only with the utmost caution lest he open up new avenues of infection. He will not have the temerity to adopt the heroic measures of hysterectomy, knowing full well that the uterus he can safely remove is the uterus that does not require removal. Nor will he follow the suggestion of Trendelenberg in ligating the pelvic veins and thereby add danger to danger. In event of a pelvic abscess vaginal drainage will be established and in the earliest stages of peritonitis adequate drainage may save life, but beyond this surgery has no place. Koehler aptly expresses his views on surgical interference in puerperal sepsis. He says: "One principle applies to all forms of puerperal infections: they will yield satisfactory results only if they can be performed early enough and without any additional harm to the patient. These terse requirements incidentally also express the wealth of difficulties which often prevent a realization of the hoped-for good effect. The decision of 'early enough and not too late,' which in practice often means the equivalent of 'unnecessary,' proves one of embarrassing perplexity."

If surgery is so restricted in its application to puerperal sepsis, what then can be expected of other lines of therapy? Serum and vaccine therapy have been tried and found wanting and are capable of actual harm. Chemotherapy is of no value. It is doubtful if any known drug possessing bacteriocidal powers is capable of converting the blood into a medium that will be unfavorable to the life and growth of streptococci. But we do have in immunoblood transfusion a remedy that is capable of most beneficial results. The bacteriocidal power of the blood can be enhanced appreciably by repeated blood transfusions. The addition of four to eight ounces of blood at intervals of two or three days is often of great value in

fortifying the blood. This should be our sheet anchor and along with this procedure should be the application of every known measure to increase the body resistance. Fresh air, nourishing diet, good nursing are all important adjuncts. More than this we cannot do; we do not dare to do.

It is impossible to foresee the ultimate outcome of any case of infection in its earliest stages. We have no way of determining the virulence of the infecting organisms nor can we estimate the tissue or biochemical resistance of the individual infected. We can be guided by experience in looking with alarm upon cases in which a high fever develops in the first and second days of the puerperium; when the fever is high and continuous rather than intermittent; when the pulse is increased out of proportion to the rise in temperature and in the presence of persistent vomiting, delirium, rapid respirations, pneumonia, incontinence of urine and feces and insomnia.

DISCUSSION

A. M. MENDENHALL, M.D. (Indianapolis): I have a distinct personal feeling that we have been making a mistake, that I have been making a serious mistake in the college in teaching operative obstetrics. The small amount of time allotted to me—and it is not peculiar to Indiana University—for the teaching of obstetrics demands that I give almost all of that time to teaching the physiology of the puerperium, of labor and pregnancy. In other words, there is little time left to consider pathology, and if we do consider it seriously it must be the one group of toxæmias which is so prevalent. Almost one-third of our deaths in the puerperium are due to toxæmia, and if we pay any attention to that there is very little time left to teach operative obstetrics—two to five hours, and that largely didactic. The orations may be good, but they are not what the medical student needs—he needs actual experience with the patient. A manikin is fairly satisfactory—we have to use it, but it is no substitute for the living patient.

Dr. Findley mentioned the time given to the teaching of surgery in our medical schools, and yet the neophyte in medicine goes out not expecting to do major surgery; he expects to go elsewhere to complete his course before he does surgery, yet he is expected to go out and do all kinds of obstetrics, perhaps Cæsarian section and perineorrhaphies, etc. I do not feel that we are prepared to give the student the proper training because our clinical facilities are far too limited. I have communicated with twenty-five or thirty of our leading institutions and they acknowledge that not many of their students have the opportunities they should have in this line. We cannot do better until we have a place where the student

may apply his obstetric knowledge to the patient, and that means a large number of obstetric patients, because the obstetric patient is limited in its teaching capacity.

In regard to puerperal sepsis, which the doctor has so well placed before you, in the few minutes allotted to me I can only stress a word of conservation. I am glad to hear the doctor say what he did about the curette. Yesterday morning I had a few students watch me empty a uterus of retained secundines. I showed a curette, simply from force of habit. I have not used it for eight years in a puerperal uterus. In other words, any round cell leukocytic infiltration must not be curetted, but for retained products of conception perhaps a dull curette, or better still, a sponge forceps, may be used.

I am glad to have Dr. Findley bring out what he did in regard to ligation of thrombi in the pelvis. It has not met with success; neither has hysterectomy. At first it was assumed, and we still have two or three men who believe that hysterectomy is indicated in the puerperal septic woman. However, I think Dr. Polak has proven, and has analyzed his results, that his mortality was increased whenever he tried to do operative procedures on these puerperally infected patients. The puerperal woman needs to be put at rest as completely as possible. If there are definite evidences of retained products, get them out as gently as possible. If there is abscess formation, drain it, of course—that goes without saying—drain it with the least possible instrumentation, and that means ordinarily a puncture of the posterior vaginal vault. Then give transfusions, not massive transfusions, but small repeated transfusions. And I believe more patients are surviving since we use glucose than before we used it. We give glucose irrespective of whether we get a donor or not. Sometimes we do not get a donor for transfusion.

E. E. PADGETT, M.D. (Indianapolis): I thought about the subject announced on our program rather than the one Dr. Findley has elaborated, so I will approach the subject of puerperal sepsis more from the standpoint of pelvic surgery.

I think there are a number of men in this audience who will remember that I have insisted for a great many years that the ordinary delivery, the ordinary obstetric case, requires more skill than fifty percent of the abdominal operations we are called upon to do. As Dr. Findley says, and we all agree, the graduate in medicine for the first year or two is not found doing major surgery, and he should not do obstetrics in anything but normal cases, and many normal cases would be better to be handled by someone who has had experience and training in this direction. If it is important that we give a man who is going to do surgery special training, it surely is important

to give a man who is going to do obstetrics special training. Of course that is done more today than formerly. Some men do not do obstetrics at all, and on the other hand, some men do obstetrics as a specialty.

The point I was glad to hear Dr. Findley make is the method of invasion of this infection. We think of it going through the uterine wall into the broad ligament much more frequently than it really occurs. He said the fatal puerperal sepsis cases are usually streptococcic, which I think is right. That should give us a clue to our treatment, and our treatment I think should be conservative. I want to impress upon you the importance of staying away from these people during the invasion stage. Many a woman will get well if she is let alone.

I recall within the past eighteen months a case I had—a woman I operated. She was past the child-bearing period and I did a hysterectomy. While she was in the hospital I met her son, who informed me that his wife was very seriously ill. I asked him what was the matter and he said she had her first baby, that she had a high fever and was very sick, and she had to be operated. She died two days later. That will happen many times if the temperature is not allowed to come down. Puerperal infection is the most serious thing I can think of that the abdominal surgeon has to handle.

MILES F. PORTER, SR., M.D. (Fort Wayne): I would like to ask if there has been any investigation made as to the cause of our increased mortality and morbidity in this country as compared with other countries. How do you know these cases are taken care of by men less well trained? Further, is it not true that American women have a better defense mechanism than the women across the water? Has there been any investigation to show that one thousand German women, or English women, under the same circumstances as one thousand American women, would do any better? It seems to me it is worth while finding out about that.

MAURICE BUCHSBAUM, M.D. (Gary): I would like to ask the status in puerperal sepsis of alcohol injected into the uterus, as practiced in the Viennese clinic. I do not recall who initiated that treatment, but they claim good results in eighty percent by alcohol injections.

JOHN F. LOOMIS, M.D. (Marion): I would like to ask Dr. Findley how long he would leave a retained placenta or a portion of retained placenta, without fever, and if it should be retained two or three days and fever develop, how long would you leave it? And how would you remove it?

M. A. AUSTIN, M.D. (Anderson): I would like to ask Dr. Findley if I understood him right. I thought he said he had never known a tubal infection other than a gonorrheal infection.

CHARLES STOLTZ, M.D. (South Bend): It seems to me that when the physicians are finding fault with too much surgical treatment they are barking up the wrong tree. It seems to me there is no better training for an obstetrician than good surgical training.

In regard to the teaching standpoint, I sometimes think if we could substitute thinking for training it would be better. We are in a state of transition from bedside obstetrics in the home to hospital obstetrics, but I do not think the prediction of a few years ago that our obstetrics would be wonderfully improved by hospitalization has been realized. It has come to pass that the average young man who goes out of college depends upon the nurse to prepare for any kind of a surgical or obstetrical procedure, and he is not thinking along the line of obstetrics. He may be trained in obstetrics, but he is not thinking in terms of obstetrics. Therefore, I wish to emphasize that the best training for obstetrics is a good surgical training, and the best asset for the young man who is going to do obstetrics is to use surgical judgment in connection with such procedures.

CHRISTOPHER M. REYHER, M.D. (Gary): What statistics have you to prove that the mortality is greater in this country than in Europe? There is considerable false propaganda being sent out through the United States by a certain bureau at Washington, making that statement. Mortality and morbidity are different. I wish you would explain that.

J. M. DOBSON, M.D. (Chicago): I thank you for the opportunity to discuss this paper. Two things come to my mind in connection with this subject. One is the fact that this great mortality among delivered women, with the consequent infant mortality, is of vital interest to the whole people of the country and has aroused their interest. Why? Because we as a medical profession have not adequately met the situation, and until we do we may expect the women of the country, through health demonstrations, maternal clinics, and maternal welfare clubs, to take up the work—a work for which they are not properly fitted. It is all very well for us to say they should let us run such matters, but the proper answer is to do something ourselves.

I am heartily in accord with Dr. Findley when he calls attention to the defects of medical teaching in our schools in regard to this vital matter of obstetrics. To one of the last gentlemen who spoke I should like to say that too much of the surgical teaching is not training; it is simply an exploitation of the ability of the professor in the operating arena. Students are not taught obstetric procedure by any such operation as that; they are taught only by actual participation in the care and delivery of the patient. I think sometimes it

would be better if in the undergraduate schools we made it a rule that no major operation should be done before students, which operation they will be unfitted to perform until they have had post-graduate instruction and training in major surgery.

I want to relate an experience in which I think you will be interested. Quite a number of years ago in a medical school in this country a system was inaugurated by which students were given their choice of a certain number of courses, the so-called elective system. They were allowed, in the order in which they registered their names, a choice of certain courses, and when a certain number was reached in each course the registration closed. About that time a young man returned from Europe who had done some special work in the pathology of the female genital organs, especially microscopic pathology. He instituted a course which at once became in great demand. It was announced that this course would be given one winter quarter and the students allowed to register in the order in which they secured numbers from the clerk's office. Shortly after midnight before the day when registration was to occur the janitor of the building in which the college office was located heard some students at the front door, and going to the door he found three or four students. By four o'clock there were forty or fifty students, and at seven there was a crowd. It turned out that it was this particular course that all these students were seeking. Only about thirty could take the course. To my mind that was a great tribute to the value of the elective system that permits students to study the things in which they are particularly interested; it was also a great tribute to the young man—to the time, the energy and the ability he was putting into that course. That institution was Rush Medical College, of which I was at that time dean, and the instructor was Dr. Palmer Findley, the speaker of the afternoon.

H. O. BRUGGEMAN, M.D. (Fort Wayne): I would like to call the attention of Dr. Findley to the fact that most normal deliveries made in Europe are made by midwives. Their midwives are not better trained than American doctors. I should like to have him explain that in his closing remarks.

PALMER FINDLEY, M.D. (closing): It is a great joy to have my good friend, Dr. John M. Dodson, here to discuss this subject and to have his commendation of the contention that clinical obstetrics is not receiving its fair share of recognition in our teaching institutions. All will agree that puerperal sepsis is a preventable disease and as such it is fair to assume that better educational facilities will produce better results. I recently made the assertion before the American Association of Obstetricians that "between the theorizing

of the Ph.D.'s in our medical faculties and the gormandizing of the general surgeons, obstetrics has done well, indeed, to maintain any degree of individuality." William Sinclair, of London, said: "Students are taught surgery which they will never practice and later practice midwifery which they were never taught." Dean Emerson, of the State University of Indiana, rightly says that, "It is the business of medical schools to prepare the student for the first two years of the practice of medicine." In these first two years of general practice, what, we ask, are the reasonable demands upon the time and skill of the neophyte of medicine? Minor surgery and first aid in major surgical conditions are within his scope, but it is scarcely probable that he will be forced into the full responsibilities of major surgical practice. Not so with obstetrics. Any and all problems, however tragic, may challenge his resources and under the most trying of circumstances. Misdirected efforts may lead to disastrous consequences as indeed they often do.

The disgraceful showing we are making in puerperal infection is in great part due to the lack of training in clinical obstetrics. There are whole states in our union that cannot boast of a single trained obstetrician and with the result that eighty percent of all obstetric practice is in the hands of midwives and general practitioners. And in event of serious obstetric complications too often the case falls into the hands of the general surgeon. We will have more and better trained obstetricians only when our institutions provide the necessary facilities for such training. I rejoice to say that the medical department of the University of Indiana now possesses such facilities and I predict that within a decade the results will be apparent in your state.

Dr. Porter asks if there could not be some other reasons for the high mortality in this country as compared with Europe than the lack of education. The women of Europe as a class are not as well nourished as are the women of this country and they are not as well housed. We would, therefore, expect to find a higher incidence of infection among the women of Europe, all other factors being equal. But they are not equal. Midwives deliver a large proportion of the women of Europe. They are as a class fairly well trained and are not permitted to interfere with nature's forces. As a consequence, a trained obstetrician is called in or the patient is sent to a maternity hospital when complications present themselves. The high rate of morbidity and mortality from puerperal sepsis in this country is largely the result of injudicious interference on the part of the physician in charge. And by this I mean the making of unnecessary vaginal examinations, the unwarranted resort to forceps and to Cæsarian section in a disproportionate number of cases.

Our teaching institutions have demonstrated that women can be delivered safely in the slums of our cities if well-known principles are adhered to. It follows that even better results may be attained in our better homes if the physician in charge has had the right sort of training.

I am asked if the swabbing of the infected uterus will serve a good purpose? Yes, if the infection is superficial, but where the deeper structures are invaded no good can come from any form of intra-uterine applications.

Again I am asked how long would I leave placental tissue in the uterus. Personally, I do not leave it long. Let me say that as a rule placental remains do not lead to infection, but rather to subinvolution and hemorrhage.

Are there tubal infections that are not due to gonorrhœa? Yes, but they are much in the minority. Where the tubes are invaded following full term labor or abortion, the gonococcus alone or combined with microorganisms is usually the causal factor.

Let me say in answer to the last question that I think we can rely upon the statement that the mortality and morbidity from puerperal sepsis is highest in this country among the twenty-one leading nations of the world. And that what is still more disquieting we have not improved our morbidity and mortality in puerperal sepsis in the past fifteen years. I have tried to point out the fundamental reason for this bad showing of ours.

SEASONAL HAY FEVER AND BRONCHIAL ASTHMA*

JOHN D. GARRETT, M.D.
INDIANAPOLIS

There are few conditions met with in the practice of medicine more varied as to cause, symptomatology, or cure, or which require more painstaking study if partial or complete relief is to be obtained than hay fever and asthma. If the condition be definitely seasonal in character and caused by pollens, it is seasonal hay fever; if the complaint be irregular in occurrence, the attacks bearing no relation to the month or season of the year, and due to inhaled substances other than pollens, it is perennial hay fever. The distinction is made solely upon the difference in causative agents, the clinical manifestations being practically the same. Since the patient can as a rule tell the month, day and hour when his symptoms will appear, it is usually possible by a careful history-taking to differentiate the two types.

The difficult case in which to make a positive diagnosis is the one where in the first attack there are no previous symptoms or history of heredity. The following case will illustrate:

The subject was born and raised in the country; no family history of hay fever, bronchial asthma, or urticaria. Left the country to live in the city, where, previous to development of hay fever, had had some nasal and sinus infection with polypoid degeneration of the mucous membrane of the nose, and removal of these growths annually for three or four years. While visiting in the country, developed what was supposed to be a coryza or cold. These visits to the country had been annually during the month of August, and the patient had been exposed to fields of ragweed, this exposure being greater than at any previous time. The attack began with sneezing associated with excessive watery or clear mucous secretion from the nose, frontal headache, cough with hoarseness lasting for several weeks. There was puffiness and itching of the eyelids; no bronchial asthma. These symptoms all cleared up and were forgotten until the next season, at the same time when there was a return of all the symptoms, aggravated by cutaneous symptoms, aural manifestations and tinnitus, together with itching of the soft palate and pharynx, and in the course of two weeks bronchial asthma developed. These symptoms have returned each year at the same time for twenty years, somewhat modified in later years by some surgery of the nose, and by pollen antigen treatments.

Difference of opinion exists in regard to the role played by nasal infections and nasal anomalies in the production of this disease. In as high as twenty-five percent of cases, sinus disease, either hyperplastic or suppurative, is found. Kahn, Selfridge, Piness, and Miller say that these sinus conditions are coincidental with or directly secondary to nasal allergic manifestations; that the oedema present during repeated acute attacks finally produces hyperplasia of the mucous membrane of the various sinuses, interferes with the blood supply and drainage, closes the ostia, thereby producing a fertile field for bacterial invasion and growth. Many others, however, allergists as well as rhinologists, hold the opposite view. In the above case there is evidence that the nasal disease and sinus infection preceded the development of the attacks of hay fever and bronchial asthma.

Clinical experience has established firmly the facts in relation to the etiology of seasonal hay fever and bronchial asthma, as well as suggesting a similar mechanism being responsible for such disease states as urticaria, various dermatoses, and vasomotor rhinitis, but the exact nature and mechanism of production of hay fever and bronchial asthma are still unsettled questions. It is an established fact that these diseases are not caused by any preformed toxins in the pollens, epidermal proteins, foods, dusts and other substances of animal and vegetable origin known to be etiological

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agents. Hay fever is a symptom-complex produced whenever a foreign protein comes in contact with the nasal mucous membrane of a person who is sensitive to that protein. Heredity plays an important role in the etiology of hay fever and bronchial asthma. This has been mentioned repeatedly by even earlier writers. Cook and Vanderveer in 1916 found that the constitutional peculiarity which makes probable the development of hypersensitiveness is transmitted according to Mendelian laws as a characteristic. They also found that the form of sensitiveness in the parent is more often different from that in the offspring than it is identical; also that the more complete the inheritance the earlier the manifestations.

Natural sensitiveness occurs spontaneously in a large percentage of individuals. In animals it occurs consistently as a result of treatment with foreign antigens. The fact that sensitiveness can occur spontaneously in animals seems to have been proven by Rosenau and Anderson, who sensitized animals to horse serum by feeding horse serum. Several investigators apparently have found that certain diseases render people without hereditary predisposition liable to become sensitized, which is similar to experimental anaphylaxis in animals. According to W. D. Duke, inheritance plays no part at all in guinea pigs. All are alike in their one hundred percent capacity for being sensitized, and he questions the possibility that monkeys can be sensitized at all. Human beings, if they are to be compared with animals in this respect, must be of two types immunologically: first, those having a mechanism (analogous to that of the guinea pig) which under suitable conditions is capable of becoming sensitive; and, second, those (analogous to monkeys) who are incapable of becoming sensitized, or at least with great difficulty. Coca observed that among fifty of his pollen collectors there was not a single case of sensitization.

Victor C. Vaughan, in "Sensitization and Its Relation to Practical Medicine," says that under normal conditions it is impossible for foreign proteins, as such, to gain entrance into the fluids and tissues of the body, and only after they have been split up into relatively simple compounds, such as peptones and amino-acids, do they gain entrance. Occasionally, however, as the result of abnormal conditions, highly complex foreign proteins do gain entrance into the body in an unchanged form. They represent an abnormal constituent which must be disposed of. Certain body cells are called upon to develop a proteolytic enzyme which will act upon the foreign protein circulating in the body and split it up into simpler compounds available for body use. The development of the new enzyme in the body is gradual and the cleavage of the foreign protein against which it is effective consequently

extends over a considerable interval of time. During the process of cleavage certain poisonous cleavage products are formed, but they are not present in sufficient amount at any one time to give rise to symptoms. When the foreign protein is disposed of, this newly developed enzyme is stored up in certain cells of the body, probably in the smooth muscle of the blood vessels, as a zymogen. A second injection of the same protein reactivates this zymogen, the enzyme is liberated in comparatively large amounts, and is available for immediate use, consequently the cleavage takes place at a much accelerated rate. In this instance the poison resulting from protein cleavage is liberated at once in sufficient amount to give rise to the production of marked symptoms of illness and, provided the amount of poison be sufficient, death may result. The injection of the serum protein of a horse's blood under the skin of a guinea pig, and a week or two later a second injection of one drop of the same horse serum into a vein, will lead to death. The pig has become sensitized.

Duke says one obstacle stands in the way of the hasty acceptance of this theory, namely, the time interval. The almost immediate onset of symptoms which follows the injection of sensitive animals does not fit well with a lytic process, for lytic processes are usually slow. The time interval seems too short for marked cleavage to take place through the action of an enzyme. There is sufficient evidence to prove without question that the site of the reaction which carries in its train the symptoms we speak of as anaphylaxis is predominantly in the cells of the body. The most constant reaction, and the one responsible for the fatal issue in animals, is contraction of non-striated muscle. In the quinea pig this occurs in the bronchioles, in the rabbit chiefly in the pulmonary vessels, and in dogs chiefly in the hepatic circulation.

Although this appears to be the most striking site of reaction, it is apparently widespread. Because of the involvement of the nervous system the action of organs is affected indirectly through this medium. The chief point of attack seems to be the end organ itself, or a point between the never-ending and the end organ. Kolmer says that insofar as the human being is concerned, the shock organ responsible for hay fever and bronchial asthma, as well as urticaria, would appear to be the smooth muscle of blood vessels, adrenalin constituting a physiological antidote.

Diagnosis: Patients sensitive to pollens usually give positive skin tests, and useful information is thus obtained. Methods of making skin tests are given in detail in recent books on allergy. Requisites should be complied with before conclusions are drawn, if ragweed is suspected. There

will be relief of symptoms by removing the patient from the ragweed district, and the symptoms should recur if the patient is again exposed naturally to ragweed pollen in the air. Many patients with seasonal hay fever and bronchial asthma give positive skin tests to vegetables, fruits or grains, and actually obtain partial relief of hay fever by avoidance of the food products to which they give positive tests. Such substances may have no untoward effects except during the pollen season. Duke refers to Dr. R. C. Lowdermilk, a sufferer from hay fever for a period of twenty years, who conceived the idea that hay fever was a phenomenon of anaphylaxis, and applied Vaughan's theory to the condition. In 1911 he developed a method of treatment by subcutaneous injection of pollen extracts which is not different from that generally used today, and obtained complete relief.

With the improved methods of treatment some writers have reported clinical relief in 100 percent of their cases. Almost any kind of pollen treatment will relieve about one-third of the cases, while in the remainder persistent and thorough treatment does not give the relief desired. Probably the environment and habits of this class of cases has a great deal to do with the results of treatment.

The treatment consists of either the avoidance or removal of the specific cause, specific pollen treatment, and symptomatic treatment.

Little need be said about the avoidance of the specific cause. This has been practiced by a majority of the subjects. Someone has said that seasonal hay fever and bronchial asthma are largely diseases of the white race, and especially of the well-to-do classes. Those at home should avoid contact with the specific pollen as far as possible, having windows closed or some mechanical filter keeping out the air-borne pollens and dust, for dust will precipitate an attack on a sensitive nasal mucous membrane during the seasonal period. Schippergrell has estimated that about one percent become sensitive to pollens. Sensitiveness is remarkably specific in some individuals. A patient sensitive to a certain weed in one district may not react to the same weed growing in another district. Duke thinks a competent botanist is essential for the careful study and treatment of hay fever.

Symptomatic, or local, treatment during an attack has proven of little benefit in my experience. The reaction is usually worse than the condition treated. Adrenalin is the one remedy effective in bronchial asthma and hay fever, when given subcutaneously and in the smallest dose which gives clinical results. Ephedrine given in capsule modifies and greatly relieves the nasal symptoms and asthmatic condition, but not to the same extent as adrenalin.

DISCUSSION

KENNETH CRAFT, M.D. (Indianapolis): As a victim, I may say that hay fever is no joke, except to those who do not have it.

The treatment depends essentially on the diagnosis of the cause. There are a good many factors that have to do with the causation of hay fever, the outstanding one probably being the sensitization of the great majority of patients to some pollen. In this climate and all over this country the chief offender is ragweed, except west of the Rockies. But you cannot treat a hay fever patient intelligently unless you know just what particular pollen you are going to use, and the drug houses that put out shotgun doses of pollen are making a mistake, because if you treat a patient with grain, or golden-glow, or some of those things to which they are sensitive, although we do know they cause hay fever in some cases, there is a chance that you will sensitize them to those things and also cut down on the dosage of the specific pollen that they need.

A number of methods of treatment are being used today. Local treatment I have given up, both for myself and my patients. I think anything locally in the nose during an attack of hay fever simply adds to the irritation. I have, therefore, refused it in my own case, and I do not advise it for my patients. The reaction, to my mind, is much worse than the temporary relief gained.

A few years ago I tried ultraviolet treatment on myself. I did it more as a matter of investigation and seeking for information about that method of relief than for any relief it might afford me, and I went through six weeks heroically. But the treatment was worse than the hay fever, so I gave it up.

There are a great many preparations on the market every year claimed to be cures for hay fever. The basis of probably the majority of these preparations is calcium, acting on the theory that most hay fever patients have a calcium deficiency; but I believe if these patients were given calcium in the form commonly used they would gain relief from hay fever and probably not need much further treatment. Last summer I ran about twelve calcium tests on hay fever patients through the kindness of Dr. John Warvel of the Eli Lilly Company laboratory, but we did not find a single one that showed a calcium deficiency, so we could not go further with the test at that time.

Of late years much has been done with ephedrin locally for different conditions, and the last two years a good many of my patients have been using it internally for hay fever and asthma particularly. I have used it and have gotten some good results. Usually we start a few days before the patient's hay fever season begins, giving him

ephedrin slowly, small doses, about three-eighths of a grain, building it up as fast as possible, changing the dosage every three days. You will get nervousness, tremor and palpation if they react to it and they may be frightened, but if you build them up slowly you can carry them past that point and get good effects from ephedrin internally. I have not had the nerve to try it alone. I have used it in conjunction with pollen treatment during the season, and I think the relief is more marked than when pollen is given alone. Next year if I can bring myself to it I will try ephedrin alone and may have something to report to you along that line.

There has been a lot done on the causation of hay fever from sensitization to certain food products, and I want to quote very briefly from an article written by Dr. Eyermann, of St. Louis, that appeared in the *Journal of the American Medical Association*. I will read his conclusions and give a couple of case reports.

"A woman, aged thirty-five, seen Nov. 16, 1925, had complained for the past ten years of stuffy nose, which was worse in winter. She had had eight nasal operations without permanent relief. There was no other allergy in the patient and no known allergy in the antecedents. Four plus reactions were obtained by the intradermal method to orris root, rice, milk and timothy; two plus reactions were obtained to tomatoes and corn. Negative reactions were obtained by the cut method. Purposeful feedings of tomato and of milk were followed by nasal symptoms. When these foods were excluded from the diet and contact with orris root was avoided, she was observed through two timothy seasons without the development of any nasal symptoms.

"A girl, aged seventeen, seen in September, 1924, had had nonseasonal asthma from the age of two to twelve years; this was followed by a symptomless period for three years, which was in turn followed by hay fever beginning in August, 1922. She had blocked nose throughout the winter. There was no allergy in her antecedents. Positive reactions were obtained by the cut method to potato and to ragweed. The patient had had two years of adequate ragweed desensitization but without benefit. The avoiding of potato altogether, with treatment for ragweed, was followed by a symptomless season. So long as she avoided potato there was no nasal blocking throughout the winter. While she was under observation it was found that the eating of cantaloupe was followed by a sensation of thickened lips, nasal blocking, and sneezing. She did not have any hay fever during 1927, the only treatment being the exclusion of potato and cantaloupe from the diet.

Conclusions:

"1. Nasal allergy (vasomotor rhinitis) may be induced by the ingestion of foods.

"2. Some of the cases observed seem to indicate that either the simultaneous or the sequential action of several allergens is necessary before symptoms occur. In some instances, it would seem to be a matter of a total dose which controls the appearance or the severity of symptoms. The total dose may result from a combination of inhaled and ingested allergens. This occurs in patients with either seasonal or nonseasonal symptoms.

"3. Nasal allergy as result of ingestion exists with negative cutaneous reactions.

"4. Nasal allergy due to ingestion can be determined by experimental manipulations of the diet, and clinical study following purposeful feedings of suspected allergens."

The main fault with the sensitization to a particular plant pollen is caused basically by an error in metabolism which sensitizes the patient to food proteins, and if you can find out the food proteins to which he is sensitive and avoid feeding those foods, he in turn may develop a sensitization to pollen of the different plants. That is a pretty broad statement and bears further investigation, but it is a mark of progress along this line, and it may be that is the secret of the whole thing.

The last point in the discussion of treatment is pollen therapy. I believe that pollen therapy is far above any other line of treatment for hay fever in the relief it affords and the relief we may expect from it. As I said before, we must know specifically which particular pollen we want to use, or combination of pollens. We find patients who will react to different forms of ragweed, grain, goldenglow, etc. They can avoid grain and goldenglow and find relief, but they cannot avoid ragweed. There are two forms, the giant and the short ragweed. Usually the effect of one is much more marked than the other, and in those cases we use simply the one; but where the reactions are similar in their intensity we use the combined extract of both giant and dwarf ragweed. Annual sage belongs to the same family as ragweed, and ragweed will take care of that sensitization.

The pollen treatment is divided into two classes—preseasonal and postseasonal. Personally, I have had much better results from treating patients preseasonally than during the season, but many patients will not come until the season has developed. You cannot carry them to full dosage of preventive pollen treatment during the season.

There are two methods of giving pollen—the subcutaneous method and the intradermal method. Duke advocates the intradermal method and speaks very glowingly of it. Year before last I tried it. I let all my patients go until the season

commenced, myself included, and then commenced the intradermal treatment. It has several advantages, in that the dosage is very small, and the patient is not subjected to the long course of treatment prior to the season; but the results did not bear out the reports that Dr. Duke and others had given. I did not get relief nor was I able to give my patients relief by using the intradermal method. Some patients did not come back because they did not get the relief they expected. This last year I went back to the other method and results were much better. I think, as Dr. Garrett has said, that one-third of all hay fever patients in whom you can get positive pollen reaction will be benefited by the average pollen treatment. I believe the reason we have not given relief to the other two-thirds is because we have not given them enough units. The relief gained from pollen treatment varies directly with the sensitization of the patient. The more sensitive the patient, the more relief we can give them, and I think we should give them more units. I find I can give a patient up to 3,000 units and he will have no relief, but give him 6,000 and he will go through the season very comfortably. It is my habit now to carry out these treatments, going as high as 8,000 to 10,000 units, and as I go higher and higher each year I find I get more and more relief. Some men are fearful of the reaction to such a high dosage, but as a matter of fact I have had fewer and less severe reactions with the high dosage than with a dose running around 4000 to 5000 units.

It is my custom to start the treatment about three weeks prior to the expected attack, giving the patient as much as possible each day at first, and then only every three or four days. At the beginning I give the patient a prescription for ephedrin and instruct him, if there is any reaction, to take one or two capsules, enough to control it. Occasionally a patient will get a little flushed or nervous and have a peculiar sensation, but if he takes ephedrin right away it will control it. Then I instruct the patient to go ahead and take ephedrin during the season, and take the dose of pollen that he has taken through the preseasonal treatment about once a week during the season. Following that line I have been able, for myself, to gain about seventy-five percent relief. This last year, following that method, every patient I treated was able to follow his usual habits of work during the season, was comfortable, and did not find it necessary to go away to seek relief.

There is one word of warning that should be uttered, and that is on the matter of giving serum, or anything containing serum, to patients who have hay fever and are sensitive to any of these allergens. Last spring one of my patients whom I was not seeing at that time, a hay fever patient, was given immunizing doses of antidiph-

theritic serum when diphtheria broke out in her school. She developed promptly severe reaction which almost terminated fatally. I think that note of warning ought to be sounded—that patients who are to receive serum of any kind should be questioned regarding the history of any sensitization to these foreign proteins, whether in the matter of seasonal hay fever, or urticarial eruptions throughout the year.

A. E. BULSON, M.D. (Fort Wayne): Personally, I see very few cases of hay fever. I have been caring for cases of it for a good many years, but I think most of the patients have been discouraged and are either treating themselves or have gone to another climate where they will be reasonably free from the condition. Many are being treated by the general physicians. I think many general physicians in our section are attempting to relieve hay fever sufferers by the pollen treatment, without having made a study of the subject. The more I consider hay fever, read about it and learn from the experiments and work of others, the more I am inclined to believe that it is a condition which requires most careful study in order to eliminate a great many factors that may lead us astray. It seems to me it would be well to have a good man who makes a specialty of hay fever and who devotes a good deal of his time to it. I believe that most failures are due to the fact that we have not recognized that patients may be susceptible to several different things. For instance, I happened to have a talk with a man out west who is doing a great deal of work in hay fever, and he told me he had had patients who had pollen treatment and had been given ragweed with the idea that it was the only offender, whereas these patients were also susceptible to Bermuda grass, grain, and something else. He also said that most of the men who treat hay fever fail to take into consideration the allergy that exists in certain kinds of food. I was rather surprised to have him tell me that out of a large number of patients treated very successfully for hay fever in late years, the majority had a susceptibility to some particular food, and the only reason they do not have hay fever and asthma through the entire year is because they have a combination of the pollen at certain seasons plus the susceptibility to food, and when these foods are in the market their hay fever is worse. For instance, some people do not eat cantaloupes until they are reasonably cheap, but as soon as they begin to eat cantaloupes they have hay fever. It was his experience that unless you test your patients for all of the weeds and grasses in the vicinity where the patients live, and also test for food allergies, you will not progress in the treatment in many cases.

If hay fever or asthma lasts throughout the year we must consider animal emanations.

you can cure hay fever or rose cold (which does not come from roses but from weeds—hay fever does not come from flowers but from weeds), but you cannot cure hay fever by pollens provided the patients are sensitive to animal emanations. Cases have been reported where all of the pets in the house, dogs, cats, and even birds, had to be disposed of because the patient was particularly susceptible to emanations from these animals. When children begin at an early age to have perennial hay fever together with asthma, it is well to investigate whether they are sleeping on feathers. A great many people are susceptible to wheat flour, and asthmatics are known to have an increase in their attacks when they indulge freely in anything made from wheat.

It might also be of interest to know that many observers claim that even if patients start with hay fever alone, it is only a short time until they also have asthma; that fully sixty percent end with asthma. It also is interesting to know that some of these patients who are having so-called autumnal hay fever and also a food allergy, aside from having a coryza in the fall will have a snuffy nose during the winter and have attacks of urticaria which come from food allergy rather than from the pollen of weeds. Some children are especially susceptible to eggs and cases have been reported of so-called hay fever and asthma in children due to taking eggs for the first time and continuing on that sort of diet. Many patients think that goldenrod has something to do with the development of hay fever, and others do not think it is much of an offender. It is on a plane with the rose, and if you hunt diligently you will find it is due to the prevailing weeds in the region where the patient lives.

This brings up the subject of intradermal tests. It has been said that up to thirty-five years of age the intradermal tests are satisfactory, and after that the subcutaneous is the method of choice, but it is necessary to check up on the weeds and grasses in the region where the patient lives and for miles around, and also the foods that the patient eats.

The treatment of hay fever and asthma cases necessitates great care concerning not only the diet but the personal hygiene. Hay fever and asthma patients do not stand cold showers well, and do not tolerate sudden exposure to cold. The asthmatic very frequently will have his attacks from two to four in the morning, and if he keeps his windows open, he is apt to aggravate the condition, so about two or three o'clock he should put his windows down. Many men object to the idea of the patient wearing very light clothing, claiming that the asthmatic should wear sufficient clothing to be comfortable and should avoid sudden exposure.

I believe that most of these cases of hay fever could be cured if we use sufficient time

to discover the actual cause, and by that I mean to determine the particular sort of allergy that is back of the condition. The failure that often occurs in pollen treatment is due to our inability to check up sufficiently on not one, but several causes.

RALPH S. CHAPPELL, M.D. (Indianapolis): I would like to emphasize one practical point. In 1879 Dr. John Bostock, of London, described the symptom-complex of hay fever. He was a sufferer himself. He described the symptoms so carefully that they remained a classic until 1928, when Dr. John D. Garrett, of Indianapolis, described them in the classical way he has before us. It seems that this is one disease in which the sufferers have done the most work, and that is a fact. I cannot discuss it from that standpoint, but the point I want to make is that we should not confuse hay fever and hypertrophic rhinitis. The symptom-complex of hay fever, as described by Nonne and Freeman, who first discovered hay fever, was an anaphylactic reaction, but hay fever now is considered a condition due to the pollen of plants. The point I want to stress is that cases of hay fever do not have a low blood calcium. There is a type of hypertrophic rhinitis in which patients will have a low blood calcium, so we must not call all cases hay fever, nor must we call them all hypertrophic rhinitis. The cases of hypertrophic rhinitis in which there is low blood calcium can be cured by giving calcium.

B. D. RAVDIN, M.D. (Evansville): I am in the class with Dr. Garrett and Dr. Craft. The first year it developed I was in northern Indiana near Fort Wayne and I could not make myself believe that I had hay fever. When I returned to Evansville in September the discharge was running out of my nose so freely that it was down on my lips and they were quite sore. I tested the nasal secretion with litmus and it promptly turned blue, so I started to alkalinize myself and that was the end of the hay fever for that year. Since that I have been a firm believer in alkalinizing patients with hay fever or upper respiratory infections. You who know Dr. Stucky and know the results he has obtained by alkalinizing patients, especially those that come with ear, nose and throat conditions, will appreciate what it means. When the patients have the first indication of beginning coryza they have them alkalinize themselves thoroughly, which will probably be the end of their infection. I feel that is one of the things we have to keep in mind in the successful treatment of these cases. I begin to alkalinize myself long before the hay fever season develops.

I agree with Dr. Craft in regard to building up the pollen units. I tried that out myself this year and took the largest possible unit I could get out of the preparation I had, and at no time did I have any reaction myself; I did have in some

others. I think these patients should be given doses, depending upon the reaction of the individual, and then gradually building up the units until they get as much as they can tolerate. I also take ephedrin, starting early and taking it through the hay fever season.

So far as local treatment is concerned, I believe in some local treatment. Most preparations used in the nose are irritating after a while, but if you use a cocain alkaloid in a bland oil you will not get the irritation that you do from a watery solution. The occasional use of an oily preparation helps to keep the mucous membrane comfortable.

W. J. LEACH, M.D., New Albany: I think there is a great deal in alkalinizing patients with hay fever. I have been a victim, but for the last three or four years I have not had it. I think a good deal of what we call hay fever is auto-intoxication. We know there are certain cases that have a neurotic tendency and we cannot account for it, but my idea is that if we keep the diet well balanced, and occasionally have a going over by the laboratory to see if we are eliminating well, and then see that we do not eat too much of anything, we would not have hay fever. I believe people who eat a largely unbalanced diet are more susceptible to these things.

The reports are so confusing that I am about disgusted with the whole thing. In the fall and spring atmospheric changes are different morning and night, and people who take little or no exercise and eat rich food are usually full of toxic material, but if you keep their skins warm twenty-four hours a day, and put them on balanced rations and cut their rations down about one-half, they improve.

I believe in local treatment. Adrenalin gives relief, but I think alkalinization is the great thing for these patients.

D. O. KEARBY, M.D. (Indianapolis): In my practice in the last three or four years I frankly admit to patients that come to me with hay fever that I do not know anything about it, and I try to find someone who can give them relief. In the last few years I have tried to interest some young men to do the thing that Dr. Bulson has suggested, and in this part of the country we need someone who will devote his time to the study and treatment and relief of these people. If a sufficient number of us feel about hay fever and bronchial asthma as I do, I would like to see this Academy go on record as recommending that we

use our influence to stimulate some one individual in Indiana to take this matter up and work it out, perhaps as Duke has done in Kansas City.

C. J. ADAMS, M.D. (Kokomo): I noticed that in maxillary sinus cases when I washed out the antrum the nose opened up all right. I had a patient, a girl, who had the so-called hay fever syndrome year after year. She came in and I washed out her antrum and found a quantity of pus. She went out that afternoon and played golf, and lost her symptoms. I found several cases of so-called hay fever that were benefited by washing out the antrum. In some I found pus and in others I did not, but they lost their symptoms. I would hesitate to mention this had it not been that a Denver doctor read a paper in which he said that seventy-five cases of so-called hay fever were relieved of symptoms by washing out the antrum. I have possibly a dozen cases that have absolute relief during the season.

A. E. BULSON, M.D.: You check them up next season. It does not cure them.

C. J. ADAMS, M.D.: Well, it is just as effective as some of these pollen and other treatments.

R. S. CHAPPELL, M.D.: How early in the attack of hay fever does this condition come on?

C. J. ADAMS, M.D.: When they are having their worst symptoms I give this treatment. I am inclined to believe it is a nasal condition and that food and pollen and other things stimulate the condition.

JOHN H. FRENCH, M.D. (Hartford City): I would like to ask how much relief these various treatments are giving, and how these patients are getting through the season now as compared with the time before ephedrin and pollens were used.

KENNETH CRAFT, M.D.: There is one other question I would like to mention—the difference between children and adults in the kind of treatments you give. We have found that children are much more amenable to treatment than adults. We can use the intradermal method during the season in children and have excellent results—maybe only three or four treatments during the whole season. We cannot do that with adults. We tell the parents to wait until the symptoms begin and then bring the child in, and some of them are not in more than three times during the season.

A good many patients complain of pain and uncomfortable sensations from the injection of pollen. The pollens are irritating unless you give them intramuscularly. They do not mind it much if given that way.

J. D. GARRETT, M.D. (closing): I just want to answer the question in regard to the length of time in which we have been able to give relief. We have begun having considerable relief in the last five years.

I thank the gentlemen for their discussion.

SURGERY IN TUBERCULOSIS OF THE LUNG*

R. B. BETTMAN, M.D.

CHICAGO

The field of lung surgery is so large that rather than attempt to survey it as a whole I am going to confine my remarks to that one portion which has to do with pulmonary tuberculosis. Although it has been very definitely established that much can be done by surgery to help the victims of phthisis, a large part of our profession is unaware of this fact.

Rest is the foundation of all treatment of tuberculosis of the lung. Almost all of the surgical interventions which are used in combating phthisis have as their chief objective the collapse and immobilization of the affected lung, or, in other words, rest of the lung. Surgery does not supplant medical treatment, but supplements it. Almost without exception every case of tuberculosis should be put to bed, given plenty of fresh air, good food and sunlight as the first step in the treatment. This can be done at the patient's home in occasional instances, but in the vast majority of cases is best done in sanatoria. Under such regime a large number of patients will be cured permanently.

Artificial Pneumothorax. Some patients, however, even with the best of care will not respond to the simple sanatorium treatment. Of these there will be found a group in whom the tuberculous lesion is confined, or chiefly confined, to one lung. This group can be helped further by the simple method of putting not only the individual at rest but actually putting the lung at rest. This is accomplished by what is termed artificial pneumothorax; that means the introduction of air into the pleural space, allowing the lung to collapse. The degree of the collapse depends upon the absence of pleural adhesions, the mobility of the mediastinum, the quantity of air introduced, the final intra pleural pressure, and also, to a small extent, upon some intrinsic changes in the lung itself. Artificial pneumothorax produces as a rule a relative immobilization, rather than a complete one. In case cavities are present, artificial pneumothorax produces another beneficial change, namely, the collapse of the cavity. With a method of determining the exact intra pleural pressure at any given moment, and a careful check on the amount of air being introduced, artificial pneumothorax in the hands of an experienced operator is a safe and most valuable procedure. It is not, in the common sense of the word, a surgical opera-

tion, and is usually performed by the physician in the course of his sanatorium or office treatment.

Surgical Collapse. In many cases artificial pneumothorax can be continued throughout months or years. In a certain number of cases artificial pneumothorax can either never be used or must soon be abandoned because of the formation of pleural adhesions. As soon as the lung becomes fixed to the chest wall, collapse, of course, is out of the question. Motion will be transmitted to the lung directly by the tug of the chest wall, and cavities, if present, will be held open. The desirability of cutting these adhesions has been obvious ever since artificial pneumothorax has been practiced. One method of doing this has been by means of some instrument or other on the order of the cystoscope which could be inserted into the pleural space through a trocar. The adhesions are severed with an electric cautery in a manner somewhat similar to the fulguration of a bladder tumor. This method has certain technical difficulties, the chief of which is the inability to control hemorrhage from the large vessels occasionally found in the adhesions. Furthermore, it is almost impossible to make use of this method where the adhesions instead of being string-like are broad and flat. A much better method, in my opinion, is the open method in which, after preliminary artificial pneumothorax, the chest cavity is widely opened, the adhesions are cut under direct vision, large vessels being caught and ligated. I have been using recently a high frequency knife for this operation and have no trouble either from bleeding or infection. As soon as the adhesions are cut the lung collapses, and after the chest wall has been closed, is kept collapsed by the continuance of artificial pneumothorax.

Phrenico-exaresis. In some cases partial immobilization of the lung may be obtained by paralyzing the diaphragm on the affected side. This is done by interrupting the phrenic nerve and its accessories. The phrenic nerve is accessible to the surgeon in the posterior triangle of the neck where it crosses the scalenus anticus muscle. The accessory branches may join the phrenic nerve at various levels in the mediastinum, and for this reason the phrenic nerve must be evulsed instead of being simply cut. Following phrenico-exaresis the diaphragm is sucked into the chest cavity by the negative introthoracic pressure. All active respiratory motion of the diaphragm in the affected side ceases, and a large amount of collapse and relative immobilization of the lung results. In those cases in which the base of the lung is affected and bound by adhesions phrenectomy renders its greatest usefulness.

Extra Pleural Thoracoplasty. Of our original group of cases not responding to simple medical treatment we see that some can be helped by

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artificial pneumothorax, some by artificial pneumothorax plus pneumolysis, some by phrenico ex-ariesis; many, however, remain unimproved by any one or all of these procedures. However, there is still another method by which the surgeon may collapse and immobilize the lung. This method consists of reducing the circumference of the chest on the affected side by resecting portions of the ribs and thus actually squeezing the lung between the chest wall and the mediastinum. The operation most frequently used is called extra pleural thoracoplasty. The operation is usually done in two or more stages. Sections of ribs from the eleventh to the first, inclusive, are removed subperiostally. The sections removed consist of the portion of the ribs extending outwards from the vertebral costal junction for a distance of from six to fourteen centimeters, depending upon the rib, the size of the patient, and the underlying condition. Except for the actual cutting of the ribs, the operation is carried out under local block anesthesia. When carefully done, and in several stages, there is very little shock. The resultant deformity is surprisingly slight. When the patient is dressed it is often impossible to tell which side was operated upon. With the patient undressed or under the fluoroscope it can be seen that the side of the chest operated upon is almost completely collapsed. In suitable cases the results are extremely gratifying and many patients are returned to industry who otherwise would be doomed.

The foregoing is a brief summary of what the surgeon has to offer as his contribution to the treatment of pulmonary tuberculosis. I have but skimmed the surface, scarcely more than mentioning the names of the commoner operations. I have purposely omitted the discussion of the treatment of empyema, or the open drainage of large cavities because these belong more correctly in a discussion of suppurative diseases of the chest.

The success of the operations discussed lies not alone in the surgical skill of the operator, but rather in the judicious selection of the cases and their careful treatment before and after operation. It is in this selection of cases and their medical treatment, either before or after operation, that the assistance of the medical man especially trained in the handling of cases of phthisis is invaluable.

PELVIC INFECTION IN THE FEMALE*

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NEW CARLISLE

The term "pelvic infection" is not entirely comprehensive. Terms such as "pelvic infection" and "pelvic inflammation" are used to designate a

certain group of cases in which all or most of the pelvic viscera are more or less involved.

It is convenient to classify pelvic infection as follows:

First: Pelvic infection caused by the gonococcus, which causes the major portion of pelvic inflammation.

Second: Pelvic infection occurring after abortion or labor, the streptococcus playing the most important role.

Third: Pelvic infection occurring after instrumentation or operation on the uterovaginal tract, the infecting organisms being the streptococcus, staphylococcus, or colon bacillus.

Fourth: Pelvic infection caused by the tubercle bacillus or rare or minor organisms of lesser importance.

Schmitz states that about sixty to seventy percent of genital infections are gonorrheal, about twenty percent septic and ten percent tuberculous.

The modes of infection may extend by either ascension that is passing from below up through the vagina and uterus into the adnexa, as in the gonorrheal and septic infections, or by descension which are caused by migration of pathogenic organisms from the adjacent to the genital organs. Thus the infectious germs from conditions outside of but adjacent to the pelvis may cause an invasion of the genital tract. Pearse states that in 5,770 cases of pelvic infection he had observed and treated, 832 came to operation. Of this number, gonorrhea was a factor, as shown by clinical and bacteriological proof, in 715 cases, a fraction less than eighty-six percent. Of the other 117 cases, abortion claimed the majority, childbirth a close second, and all other causes combined making less than two percent. Four thousand nine hundred and thirty-eight cases escaped the knife by treatment.

In the post-partal and post-abortal infections, the streptococcus is the most frequent cause, although here the uncured gonorrhea or latent gonococcal infection must be taken seriously into account. Due to the streptococcus being usually the infecting organism, one may venture to say that the post-partal and post-abortal infections are the most serious. Other, but less frequent invading organisms are the staphylococcus, pneumococcus, colon and tubercle bacilli.

According to Frank there is an annual death rate of 20,000 due to puerperal sepsis, and for every death there are at least ten to fifteen women who recover.

A great number of pelvic infections are caused by the use of instruments in the presence of unclean surroundings. The examining finger, the speculum, the sound or probe, unless used with the greatest care and asepsis, will provide a means for the entry of organisms into the genital tract. All examinations should be made with

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gloved hands, and the instruments should be boiled both before and after each examination. In your obstetrical cases it is wise and only fair to the patient to keep everything out of the vagina as long as possible.

The results of pelvic infection may be classified into local and general. Fortunately the former greatly predominate. In general infection, the blood is involved, and there is often little or no local reaction. Local reaction is inflammatory and pre-supposes mass formation. Local lesions resulting from infection depend to some extent on the organism and the mode of introduction. The gonococcus induces urethritis and vaginitis, and extends from the vagina by direct continuity of the mucosa, and salpingitis and tubo-ovarian abscesses are the common results, with often pelvic peritonitis added.

Streptococcus, which is usually introduced through a break in the canal, produces cellulitis, ovarian abscess or pelvic peritonitis. Cellulitis is usually confined to the broad and utero-sacral ligaments of one side or the other, or is occasionally bilateral. Ovarian abscess is usually unilateral and confined to the ovarian capsule.

Salpingitis is more frequently bilateral, and the tubes may be converted into sacs so as to limit the infection, or may be joined with the ovaries into the tubo-ovarian abscesses with involvement of pelvic peritoneum.

In regard to the management and treatment of pelvic infection, we know that in the early stages the treatment is non-surgical. The patient should go to bed and stay there until advised to get up. Symptoms should be relieved, hot or cold applications to lower abdomen, and hot and copious douching twice daily with milk antiseptic solution may help to relieve the pain. If sedatives are required morphine, one-eighth to one-fourth grain, may be given. Purgation should be avoided at first in order to favor localization, and small enemas resorted to. Diet should be liquid and gradually increased. In gonorrheal infections, James Ricci advises waiting three months after onset of acute attacks before resorting to operation, as he believes that pelvic suppuration is a self limited disease and pus undergoes resolution. He says that 1,250 out of 1,500 cases of inflammatory disease of the tubes were without pus or bacteria. There was less than one percent mortality in the purulent cases. There was no shock, and the febrile reaction was not over 103.4 degrees in the non-purulent cases. Eighty-five percent went home by the end of the twenty-fifth day post-operative. In the purulent cases thirteen percent had shock, twelve percent had over 105.4 degrees febrile reaction. There were four deaths, prolonged convalescence, and thirty percent went home by the end of the twenty-fifth day.

Miller in his preliminary treatment keeps his

patients in bed until the temperature is normal for ten days, and when the operation is performed, both tubes are usually removed and the ovaries conserved. He states that the operation is less tedious and dangerous, complications fewer, mortality lower, and eighty-two percent are complete cures.

DuBose advises operation where there are progressively unfavorable symptoms during the period of rest.

Schmitz believes that by the conservative treatment, sixty-five percent of the cases become permanently well inside of a year, twenty percent have slight disability, fifteen percent remain invalids, and surgery is indicated in only fifteen percent. He believes that surgery should not be considered except for the relief of the sequellæ, such as adhesions, sterility, and so forth.

Strong is of the opinion the gonococcic and streptococcic infections cause sterility, adhesions, and chronic invalidism, and believes that surgery alone can effect complete cures in chronic salpingitis.

In cases in which early surgical intervention is required it is for the purpose of draining rapidly formed pus when the symptoms are unusually severe. In none of these is it necessary or advisable to enter through the abdomen across the peritoneum. All acute pelvic abscesses can be drained through their lower limit by an opening through the posterior vaginal fornix. Any attempt at irrigation should be abandoned for the reason that it very often proves fatal by breaking down the wall of adhesions and flooding the abdominal cavity with pus, which results in general peritonitis and death.

Polak in a study of five hundred cases of pelvic infection laid down the rule for determining the time for performing laparotomy. He said, "No infection should be operated upon until it is possible to examine the patient without finding an exudate, or until such examination fails to excite a temperature exacerbation, or an increase, in leukocyte count, or until the said count is below and remains below 11,000."

The pendulum continues to swing back and forth as to the time when best to operate; personally when the temperature and leukocyte count are normal and the patient is in good general condition, I perform a laparotomy.

SUMMARY

1. Let us not forget that gonorrheal infection travels by continuity along the mucous membranes of the genital tract, while the streptococcic infection enters the uterine wall by inoculation at some point and by means of the lymphatics or veins passes directly through the wall of the uterus.
2. The treatment of acute pelvic infection is non-surgical.

3. The treatment of gonorrheal infection in the subacute or chronic stage depends upon the degree and extent of the pelvic condition, upon the suffering which the patient has to endure, and upon her social state.

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HYDROCHLORIC ACID AS A PROPHYLACTIC MEASURE AGAINST PERNICIOUS ANEMIA

(CASE REPORT)

BEAUMONT C. CORNELL, M.D.
FORT WAYNE

As early as 1909, Hutchison¹ recommended the use of dilute hydrochloric acid in the treatment of pernicious anemia, feeling, as many others^{2 3 4} have felt, that, although the constant achlorhydria is but an associated condition, the acid administration was to be regarded as at least a rational form of replacement therapy. It might be expected to assist in controlling the overgrowth of the intestinal flora and to promote some degree of gastric digestion.

Prior to the advent of liver diet, acid administration was a cardinal point in treating the established disease in England, Europe and North America. The results obtained either singly or in combinations with other forms of treatment were never curative, but it is certain that the acid, given in doses of from one to two drams with meals, was often of considerable benefit in controlling rush peristalsis, nausea and flatulence in cases where these symptoms were prominent. Many clinicians, moreover, had and still have a belief in the value of administering hydrochloric acid continually to individuals who have been proved achlorhydric by repeated gastric analyses, believing that by this means the general health is improved and that, especially, the danger of pernicious anemia may thus be averted.

The following case is of interest because the patient, definitely proven to be achlorhydric on many occasions, progressed to pernicious anemia after two years of faithful treatment with large doses of hydrochloric acid:

T. D., aged sixty-five, complained of lack of ambition and strength. He was five feet eleven

inches tall, weighed 190 pounds, had had white hair since age of forty, blue eyes, eunuchoidal habitus, and four different gastric analyses, during the previous four years had shown the following results:

July 2, 1921—Free HCl 0°, combined acid 8°
Oct. 16, 1922—Free HCl 0°, combined acid 3°
May, 1923—Free HCl 0°, combined acid 12°
July 15, 1924—Free HCl 0°, combined acid 7°

During this previous four-year period he had complained of mental and physical unfitness and maintained an executive position of importance only by great effort. Most of his teeth had been removed because of apical infection and persistent pyorrhœa. Flatulent distention, constipation, periods of great fatigue, and nervousness had already branded him, in the absence of further pathological findings, as a case of anxiety neurosis. His systolic blood pressure, usually 150 mm. Hg., had been noted to rise to 180 mm. Hg. after heated argument. Shortly after his present examination, following a litigation by which he was greatly exasperated, he suddenly developed a mild left-sided paraplegia from which he almost completely recovered in a month. Next he experienced a sudden hemorrhage from the rectum (one quart of bright red blood), although the x-ray and proctoscopic examinations were negative.

Although he had no anemia, the smear picture being likewise totally normal, he presented quite obviously a group of findings which we were justified in regarding as "pre-pernicious anemia"^{5 6 7}, viz., achlorhydria, the pernicious anemia constitutionality, and an unexplained anxiety neurosis.

Treatment: He was given two drams of dilute hydrochloric acid in a glass of water to be sipped during each meal. His wife was very insistent upon his being faithful in this treatment and states that, during the next two years, if he missed any doses it was upon the few occasions that he was away from home.

Result: In spite of this treatment his symptoms became gradually aggravated. He presented himself, after an absence of three months from the writer's practice, complaining of weakness, numbness and tingling in the hands and feet, and a very sore tongue. His hemoglobin was sixty-five percent (Sahli), his red blood cell count showed 3,800,00 per cubic millimeter, the blood smear showed marked anisocytosis, with preponderance of oval macrocytes, and the white blood cells numbered 4,000 per cubic millimeter with only fifty-nine percent polymorphonuclear neutrophils. The diagnosis of early pernicious anemia was made. He was given effective doses of liver extract and made a very rapid recovery, stating, after a month, that he felt better than he could remember having ever felt in the past.

DISCUSSION

This case is of considerable scientific importance inasmuch as it is the first one reported of achlorhydria progressing to pernicious anemia in spite of continuous and rigid enforcement of the hydrochloric acid treatment over a prolonged period.

SUMMARY

In one carefully followed case, before the advent of liver diet, the administration of large doses of dilute hydrochloric acid, over a period of two years to an individual showing the earliest evidences of the pernicious-anemia characteristics, failed to prevent the development of the dis-

ease, which was afterwards characteristically benefited by liver extract.

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JEJUNAL AND GASTROJEJUNAL ULCER AND THEIR ASSOCIATED ROENTGENOLOGIC SIGNS

John D. Camp, Boston (*Journal A. M. A.*, November 10, 1928), is of the opinion that the importance and apparent frequency of the niche or crater deformity in the jejunum or stoma as a positive sign of jejunal or gastrojejunal ulceration has not been emphasized in the past except by a few observers. Others have doubted its frequent existence in these lesions. In this series a niche was definitely demonstrated by the examiner in eight of ten consecutive cases diagnosed as positive by the roentgenologist. In seven instances the niche was located in the jejunum and in one it was found in the stoma. Five patients were operated on and an ulcer corresponding to the niche shadow in the jejunum was found in each. The results of these observations suggest that the niche deformity is frequently present. As it represents irrefragable evidence of disease, its presence should be sought for in all cases.

ETIOLOGY AND TREATMENT OF CHRONIC ARTHRITIS

The relatively high morbidity incidence of chronic arthritis, the progressive chronic course and the incapacitating nature of the disease make the economic aspect a very important one. Willard C. Stoner, Cleveland (*Journal A. M. A.*, Aug. 25, 1928), believes that the conception of the etiology indicates that there are two distinct types, the one infectious, the so-called hypertrophic form, and the other the metabolic type, the so-called atrophic form. These forms are not always definitely distinct and one may fuse into the other. Etiologic treatment is largely limited to the infectious or toxic nature of the disease. Dietary measures have limited value. The results of careful management of these cases as described warrants the application of the measures mentioned as a routine. The treatment of these cases should not be left in the hands of the quacks and faddists. Institutional medicine should make an effort to standardize treatment which should be made intensive over a period of time, and continuous effort should be made to determine more definitely the cause. He recounts his experiences during the last five years.

INCREASING HUMAN INCIDENCE OF BROAD TAPEWORM INFESTATION IN GREAT LAKES REGION

Aldred Scott Warthin, Ann Arbor, Michigan, (*Journal A. M. A.*, June 30, 1928), says that since 1912, the clinical incidence of the adult broad tapeworm in native-born human patients has steadily increased, while their

incidence in Finns and Swedes who came to this country from the Baltic region fifteen or twenty years ago has steadily diminished. Formerly the laboratory came into contact yearly with from one to three cases; in recent years this incidence has doubled or even trebled. A still more remarkable transformation in the status of the patients has occurred. Formerly they were wholly Finns or Swedes, either foreign-born, or young native-born of Finnish or Swedish ancestry, coming from the northern part of the state. During the last five years the great majority of the patients with fish tapeworm brought to the pathologic laboratory of the University of Michigan have come from the southern part of the state, particularly from Detroit, and have been Jews. These patients were all fish-eaters, most of them stating that they preferred uncooked fish. The cases coming to the attention of the laboratory have all presented clinically a more or less severe anemia, usually a secondary anemia, but in a few cases suggesting strongly a pernicious anemia. Warthin has examined at autopsy one extremely severe form of hemolytic anemia in which two fully developed broad tapeworms were present. From other cases eggs or segments were obtained to complete the diagnosis, and after the expulsion of the parasites all symptoms of anemia disappeared. It is of interest to note that the majority of these patients had two worms. While the only certainly proved endemic area for infested fish in Michigan is the original Portage Lake region, the change in the clinical incidence of human cases from Finns and Swedes in the north to Russia and German Jews in the southern portion of the state of Michigan can only be interpreted as evidence that there are other endemic areas for the fish tapeworm, either in the Great Lakes themselves or in the small lakes of the Northern States or Canada. Because of the number of cases seen recently in the Jewish population of Detroit, it is of importance to learn the source of the fresh fish sold in the local markets. It was found that great quantities of grass pike and the wall-eyed pike used there were imported from Canada. As both these species have been found infested in the Portage Lake region, it appears highly probable that the Detroit cases are caused by the eating of raw or imperfectly cooked imported pike, as no other possibility seems evident. Plerocercoids have not been found in the local fish, although further search is very likely to show such occurrence. Warthin urges that fish from infested areas may appear in any fish market. It is apparent that such infested fish have been sold. The eating of raw or incompletely cooked fresh-water fish from northern waters is unsafe, and the public should be enlightened as to the possible dangers of fish eating without thorough cooking of such fish. In cases of mild or severe anemia without evident cause there should be repeated examinations of the stools for the ova or segments of this worm.

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EDITORIALS

THE INCONSISTENT CRAZE FOR REMOVAL OF TEETH

It has been determined definitely that toxemias from foci of infection in various parts of the human body may be responsible for many serious pathologic conditions, some of which threaten the life of the patient. Accordingly it has become the custom of physicians generally to search for foci of infection and no matter where found to insist upon their removal. Some of the organs that most frequently offer a basis of attack are tonsils, teeth and accessory sinuses. In consequence there has been a veritable slaughter of tonsils and teeth, with a growing tendency to drain and ventilate all diseased accessory sinuses. This is rational, and we may say absolutely necessary in the best interests of the patient as long as the procedures are justified. However, there is no doubt that some inoffensive tonsils have been enucleated and not a few sound teeth extracted in this craze to get rid of every avenue of infection. Insofar as tonsils are concerned, their removal, if done skillfully, almost invariably does no particular harm, even though the operation may not be indicated. In the case of teeth, the matter assumes an entirely different aspect. Perhaps it is true, as alleged by some dentists, that the medical profession has been over-exacting in the matter of removal of suspicious teeth, and many dentists have listened to specious but false advice on the part of some insistent physicians, and in consequence many teeth removed which in the better judgment of the dentist could have been saved. At all events, this craze for teeth removal has gone too far, and both physicians and dentists now are coming in for justly deserved criticism for over-activity in that direction. It is no uncommon occurrence to have a young person, in fairly good health, present a mouth from which all teeth have been extracted and the patient compelled to wear plates both above and below. In some instances these patients have charged that the dentist rather objected to such wholesale slaughter but that the physician insisted upon it. Just why the physician should insist that his judgment should prevail as against the competent and trustworthy judgment of the dental surgeon is hard to answer. Certainly the physician would not countenance

the dental surgeon's suggestions or advice in a case in which the teeth were not involved, so why should he tread on the domain of the dental surgeon? We also might add that we do not think that the well-trained dental surgeon who has any independence of thought or action should be influenced by the opinion of any physician concerning what seems to be the proper course to pursue in a case in which dental pathology alone is to be considered.

It has been charged, and probably is true, that the merciless slaughter of teeth, so common now days, is due entirely to the insistence upon the more radical men in the medical profession that teeth suspicious to the medical man should be removed rather than treated. At all events, the blame perhaps should be shared equally, and both professions are coming into deserved disrepute for radicalism that is not only inconsistent but dangerous. This radicalism has gone so far to the extreme that a certain element in the medical profession, supported by another element in the dental profession, the latter probably incited by the former, is insisting upon the removal of dead or pulpless teeth, irrespective of whether a focus of infection exists or not. In other words, they seem to remove these teeth *on suspicion*, and in consequence many pulpless teeth that have been well and properly cared for by dentists years ago, and which continue to serve a useful purpose for the patient, are ruthlessly sacrificed in the effort to get rid of everything that seems to be suspicious. These same physicians, as well as dentists, who are sacrificing pulpless but uninfected teeth, may be overlooking a dozen far more dangerous foci, some of which may be obscure but nevertheless active, and all because the teeth in their exposed position offer a ready excuse for surgical interference. We have maintained, and we still maintain, that apical tooth abscesses are foci of infection that should be removed, and usually this requires the extraction of the tooth and subsequent treatment of the abscess cavity until it is clear of infection. However, the matter of losing teeth is of such moment, from a cosmetic as well as utilitarian aspect, that there should be good and sufficient reason for removal of any tooth, and to our notion the tooth that doesn't show evidence of infection either through inspection or x-ray examination, *should be left untouched*. This applies with equal force to the so-called dead or pulpless teeth that have been cared for properly by a dentist. We know of instances where dead or pulpless teeth have been carried from twenty-five to fifty years without producing the slightest discomfort or any evidences of infection of any kind whatsoever, and in our judgment to remove such teeth is a surgical crime whether it is recommended by a physician or a dentist. If the pulpless or dead tooth through

inspection or x-ray examination *does* show evidence of infection the story is quite different and we are willing to substantiate the opinion that removal may be necessary.

We have had occasion to discuss this matter in previous numbers of *THE JOURNAL*, but we are inclined to emphasize the matter again in view of what we know is a prevailing tendency on the part of many physicians and dentists to sacrifice teeth that we believe deserve to be and should be preserved. We are delighted to know that the opinion of some of the members of the medical profession, who feel strongly on this subject, is shared by some of the leading members of the dental profession, and we note that the subject has been discussed in the April, 1928, number of the *Dental Cosmos*, one of the leading dental journals, from which we quote: "The hysterical fear aroused in the mind of the average dental operator as to the latent possibilities for harm in the pulpless tooth, impressively stressed by the medical man, has created an attitude of mind in the average dental operator favorable to the removal of all such teeth. The wave of extraction mania swept him completely off his feet and engendered a fear and doubt regarding a procedure that heretofore had apparently produced a fairly good average of surgical success. * * * Throughout all this stressful period of doubt and uncertainty we have maintained steadfastly the position that the cry for indiscriminate removal of pulpless teeth was uncalled for and unwarranted in cases where the teeth had been capably and conscientiously cared for. We are not now and never have been willing to acknowledge the implication that the root-canal operation is a failure. To the contrary we have maintained consistently that the great majority of pulpless teeth could be saved by root-canal surgery at the hands of the expert operator. * * * It should be remembered that we are confronted in the case of the pulpless tooth with the question of bacterial invasion, and the objective of our efforts in dealing with the pulpless tooth is to prevent bacterial invasion, or when such invasion has occurred, to bring about its elimination. It is not the pulpless tooth *per se* that is the pathologic menace, but the disease producing organisms that have gained entrance to the tooth that constitute the danger. It is, therefore, the infective focus that should be the point of attack rather than the tooth itself."

To all of which we say "Amen." We are pleased to know that there are some members of the dental profession, whose opinions are respected, who are not swept off their feet by this tendency to slaughter teeth irrespective of the presence of bacterial invasion. There is such a thing as ultra-conservatism as well as radicalism, and consistency and reason indicates that we should

travel the middle ground in this question of dental surgery, and while insisting upon the removal of dangerous foci of infection about the teeth, either by treatment or surgery, to guard against the radicalism that will remove teeth that can and should be preserved.

REGISTRY AND CLASSIFICATION OF TECHNICIANS

(Under the Auspices of the American Society of Clinical Pathologists)

In accordance with the trend of the times the practice of medicine is utilizing more and more the services of trained lay help. The advent of the laboratory as an indispensable aid to the diagnosis of disease has created a new specialty in medicine, that of clinical pathology. In order to carry on the numerous technical tests required in scientific diagnostic procedures, the laboratory director has found it necessary to train the technical personnel. With the standardization of hospitals and the urgent call for qualified laboratory assistants there has arisen a demand for proper standardization of the preliminary education and technical training of those enrolled in this new profession. There also has been a desire on the part of those engaged in this useful calling to raise their status, similar to the evolution of the trained nurse of a generation ago. This want is now being taken care of by a national organization consisting of a body of men who are most vitally interested in elevating the intellectual and technical status of laboratory workers. The American Society of Clinical Pathologists has taken upon itself the task of organizing a Registry of Technicians, with rules under which those qualified by education, technical instruction, and moral character will receive a certificate.

The subject is of interest to physicians in every field of endeavor, as many of them are desirous of securing the services of technicians to carry on the routine laboratory procedures. There is no doubt that the elevation of the laboratory technician to the status of a respected and useful calling will be a great help to the medical profession, to the patient, and to the scientific practice of medicine.

Another very desirable feature of the registry is the facilities it offers in finding suitable placement for registrants, and in aiding physicians to find desirable applicants.

In view of the present chaotic condition existing among the technical workers in clinical laboratories, hospitals, and office laboratories, and the diversity of qualifications among these workers, and in view of the fact that in most cases the worth of the individual technical worker can only be estimated by a try-out, this plan should appeal to both physicians and technicians. For the former to be able to know exactly the ability and

worth of the employee, and the latter to be able to benefit materially on their qualifications, and to have at hand an agency or placement bureau whereby openings for employment and advancement may be had.

By issuing certificates of qualifications to properly qualified technicians, it is the aim of the American Society of Clinical Pathologists to invest this useful calling with the dignity it deserves, to create a spirit of appreciation for the members of a vocation which is dedicated to the aid of suffering humanity.

In this registry these workers are classified under two heads, according to their education, training and experience, as:

(a) Medical technologists:

One who possesses a university degree, with one year in the basic sciences, chemistry, bacteriology, physiology and pathology or credit equivalent to the same, with at least one year's laboratory experience, devotes himself entirely to laboratory work and has rendered valuable service in the field of laboratory medicine.

(b) Laboratory technician:

One qualified to render general or special technical laboratory service with the following qualifications:

- (1) High school graduate.
- (2) One-year basic sciences or credits.
- (3) Six months' actual experience in a recognized clinical, research or public health laboratory.

Further classifications are in special fields, as:

- (1) Bacteriological laboratory technician.
- (2) Chemical laboratory technician.
- (3) Public health laboratory technician.

In the case of laboratory technician:

- (1) Bacteriological technician.
- (2) Serological technician.
- (3) Parasitologist technician.
- (4) Pathologist technician, etc.

Candidates on application are furnished application blanks to fill out and file with the registry. Cost of application is \$3.00, returnable if application is rejected, and an annual renewal of certificate fee of \$1.00 per year.

The headquarters of the Registry of Technicians of the American Society of Clinical Pathologists is located in the Metropolitan Building of Denver, Colorado. This registry has a member representative in each state.

EXTORTIONATE FEES

It is sometimes charged that physicians will take the last penny of patients as a fee for medical or surgical services that have proved satisfactory. We do not believe that the charge is true, for there is no class of people more sympathetic and more lenient in charging fees than is

the rank and file of the medical profession. However, if perchance some physician who is hanging to ethical medicine by a slender thread is guilty of the rankest kind of extortion it seems as though the whole medical profession has to take the blame for the indiscretions of the weak member. On the other hand, seldom if ever do you hear any complaint concerning extortion from other professions or trades. For instance, we have just learned from an acquaintance, who unfortunately was on trial for complicity in a murder and nothing but circumstantial evidence offered in attempts to convict him, that his lawyer at the conclusion of the trial that acquitted the suspect collected a fee of \$25,000, or all that the victim possessed of this world's goods. It perhaps is true that the skillful handling of the legal end of the case resulted in saving the accused from a penitentiary sentence, but why should that justify a fee of \$25,000? What would the courts and the public say if a physician, whose skillful treatment or operation saved the life of a patient, charged a fee even one-fifth of what the lawyers charge for keeping a client out of prison? Perhaps some people think that the average physician is a veritable Shylock looking for the pound of flesh, but there is ample evidence to show that the physician cannot be mentioned in the same breath with the lawyer, and incidentally we have had some personal experience with lawyers and know something about their "trimming" abilities.

INCREASING COST OF HOSPITALIZATION

A writer in one of the lay monthly magazines complains about the increased cost of hospitalization and says that the services of a first-class hospital are beyond the means of any but the wealthy. His argument is that many hospitals, except at ridiculous extra charges, furnish no better service than is offered at any first-class hotel, and yet the charges for that service are greater than they would be at the hotel. For instance, he says there are many good hotels where a comfortable room with meals served in the room, and customary room service added, do not charge in excess of ten dollars per day, and yet many hospitals furnishing no better service charge an equal amount, and often more, and if anything more than ordinary service is furnished it goes in at an extra fancy price.

This complaint is not entirely unfounded, for it must be taken into consideration, as pointed out by several hospital administrators, that the rising cost of hospitalization is not due to the actual cost in furnishing care for individual patients, but that the loss through charity patients who pay little or nothing, must be added to the general cost of hospital operation, and that consequently the general rate is increased. This, however, does not

meet the situation as it pertains to the man of average income, for he accepts and does pay regulation fees, and his hospital bill, with extras, even for a short illness, constitutes a great financial burden for him to say nothing of the added charges of the physician or surgeon. It may be argued that the hotel that furnishes good general service at rates comparable with the average hospital does not have any charity list, and the hotel must make a profit or close up. On the other hand, why should not the hospital share the expense of charity patients separately and not make pay patients provide for the losses. There also should be adopted some means of cutting out the expense of unnecessary roentgenograms, cardiographs, laboratory work, expensive drugs, and other items that add to the patient's burden. Incidentally, special nurses are ordered many times when the patient should be receiving all nursing attention from the floor nurses, and this last item alone is a very great hardship for the average patient and is a practice altogether too often greatly abused by hospital managements as well as attending physicians. We are in entire sympathy with the statement of one superintendent of a hospital (B. W. Caldwell, M.D., Tampa, Florida) who says: "Hospitals and their staffs cannot permit complacency to delay the early adjustment of hospital rates to meet the resources of all patients. If they are to grow and prosper, and fill their large place in the welfare of our people, both in a professional and an economic way, our institutions must take the initiative in rate adjustments. Both hospital and physician should act as one in helping the patient of moderate means in the consummation of this philanthropic service and should, like Joshua, consecrate themselves and say, 'As for me and my house, we will serve Jehovah'."

CHOICE OF SURGEONS FOR INDUSTRIAL WORK

At the present time we are hearing considerable discussion concerning industrial medicine and surgery and the manner in which it should operate. Right now there is a growing tendency on the part of employers of labor and industrial surgeons to insist that the employee should not be permitted to select his own physician or surgeon. It is argued that the free choice by the laborer of a physician who shall take care of a fracture is radically unwise. A laborer is incompetent to exercise a perfectly free choice, and he should be protected in his incompetency. Early treatment of a fracture is too important to be determined by a man ignorant of conditions. Industry pays the bills; therefore, that part of industry that pays the most should be compelled, not allowed but compelled, to dictate the surgeon. If there is the wish to have the laborer retain

the right of choosing his physician, let him limit his choice to an approved list. He never should be allowed a perfectly free choice. Thus time will be saved to the injured man. As illustrations of what incompetency does in industrial surgery, one writer (Charles L. Scudder, M.D., *Bulletin of the American College of Surgeons* for January, 1928), gives two illustrations of how incompetency in industrial surgery works. First, the final x-ray records of one hundred cases of fracture of the shaft of the femur were examined. They all were adult men who were working at remunerative jobs at the time of the accident. One year and over after the accident not one of these one-hundred cases of fracture of the femoral shaft was back on his job. This record, and many similar records, are terrible blots on the escutcheon of surgery. These resulted in permanent disability and the loss of thousands of dollars to industry. Those cases represent either poor initial treatment or poor delayed treatment with resulting disability. In many of these cases the laborer has been allowed unrestricted choice as to the doctor. Second, two men fell from a height. They each received definite injury, a fracture of the os calcis—the heel bone was broken—a most disabling injury. The first man was treated in a traditional way by rest, plaster of Paris splint, immobilization for some weeks, and physical therapy for some months, and was seen for treatment after one year had elapsed. He had received in compensation \$800 and for medical treatment \$400, a total of \$1,200 for that year. He was given further surgical care costing \$200, and additional compensation of \$200, making a total of \$1,600, because the initial treatment was inappropriate and delayed. The second man also received a fracture of the os calcis and was treated by a competent surgeon the week of the accident. The total compensation and surgical bill was \$400, and the man was back at work on his job three or four months after the accident. Contrast these two cases, \$1,600 versus \$400, and apply the conclusion in all cases where correct treatment is delayed. Dr. Scudder then says: "Should the employee be allowed to choose any doctor? Most emphatically, no. He should not be allowed to for the sake of his own protection. Should fracture treatment be delayed? If possible, not for one hour after the accident. Keep all professional and industrial work, insofar as possible, out of politics, be it municipal, state or federal."

SENDING ENDOSCOPIC CASES OUT OF STATE

Several prominent Indiana specialists have been well trained and have had considerable experience in the use of the bronchoscope and esophagoscope. Is it any wonder that these men get a little peeved when they learn that in their various

communities well-meaning but unduly solicitous people not infrequently are raising by popular subscription a purse of several hundred dollars to send a very simple esophagoscopy case to the well-known Jackson clinic in Philadelphia? Recently we noticed a newspaper account of a youngster who had swallowed a quarter, which had lodged in the esophagus, and who was sent to Philadelphia, at a large expense, when as a matter of fact in the same community a well-trained esophagoscopist could have extracted the quarter practically as quickly and safely as it was done in Philadelphia. The only difference would have been that the local doctor probably wouldn't even have had the quarter for his time and skill, whereas the railroad company, the hospital, and the surgeons in Philadelphia got several hundred dollars that had been subscribed by sympathizing neighbors and others who were solicitous and furnished the funds. In reality, in almost every large city in Indiana there is at least one specialist who frequently is doing exceedingly skillful endoscopic work without any blare of trumpets, and without getting very much credit for the splendid work he is doing. Most of his cases are charity cases, for it seems as though most of the endoscopic cases occur in the families of the very poor. As one writer in the *Illinois Medical Journal* for July, 1928, says, in discussing the subject of bronchoscopy: "Suppose an Italian child swallows a beer check. The father insists on being present while you remove it. You run the risk of assassination if you fail, and if you succeed you get only a brass disc that you cannot exchange for a cooling drink." To this we might add that oftentimes even the foreign body that has been removed cannot be retained as a souvenir, for the patient or the relatives claim it. An Indiana specialist recently was called in great haste to extract, by endoscopic methods, a half dollar that a girl of nine or ten years of age had swallowed. The foreign body was tightly wedged about half way down the esophagus, but was removed with comparatively no difficulty. A witnessing surgeon remarked that the half dollar was all that the operator would receive, but lo and behold! a few days later the youngster was sent in by the parents to get the half dollar as they claimed that it belonged to them and therefore they must have it. Endoscopic work is some of the most difficult work that is done, and in reality is spectacular in many instances, but it brings forth, on the whole, the least compensation of any kind of work that is done by physician or surgeon. In fact, the training required to become a successful endoscopist is expensive, and the equipment also is very expensive as well as very short-lived. Therefore, if the physician desires to secure any returns on his investment alone, he will be wise if he steers clear of endoscopic work.

However, if he does equip himself with an armamentarium, and the proper training to use it intelligently, he is entitled to the support of not only his confreres but the public, and if he receives that support we would hear less of large purses being raised to send poor patients to Philadelphia or other places for the removal of foreign bodies from either the air or food passages. Our comment concerning this matter is inspired by the knowledge of a comparatively simple case which was sent from Indianapolis to Philadelphia for service that could have been rendered at home equally well, and probably on a basis of charity, whereas the case really entailed an expense of several hundred dollars for service away from home. It always reminds us of the brainless Grand Rapids woman who made up her mind that while she was in Paris she would buy a beautiful piece of furniture for her home, and after making her purchase, with a very large attending expense covering not only the cost of the furniture, customs duties upon the same, and transportation charges to Grand Rapids, was much chagrined to find that the wonderful piece of furniture had a Grand Rapids manufacturer's name upon it!

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

WE take off our hats to Governor Leslie! He has made it plain that malefactors must serve the full term of sentence. There will be no leniency or undue pardoning as the result of maudlin sentiment.

WE hope that the physicians of Indiana have not forgotten to boost *Hygeia* as much as possible. It would be a good idea to send a subscription to that health journal to public libraries and reading rooms in every community.

HAVE you asked your representatives in Congress to swat the Newton bill, intended to perpetuate the odious Sheppard-Towner Act, which vicious piece of legislation becomes inoperative within a few months unless renewed?

WILL someone page Einstein? An Indiana physician claims that he not only understands

Einstein's theory of relativity but also Einstein's latest abstruse "Coherent Field Theory." Ye gods! Can the Indiana physician be in his right mind?

WE still hear of efforts to cure deafness by airplane stunts, and we think it is time to call a halt. Physicians in general should advise deaf people that it is absolutely senseless to expect to cure or even secure improvement in hearing by taking nose dives and doing other dangerous stunts in airplanes.

DON'T forget to write your senators and congressmen concerning your opinion on any proposed legislation that has anything to do with any phase of medical practice, medical education or public health. Incidentally, don't fail to let your representatives in Washington know that you are opposed to a re-enactment of the Sheppard-Towner Act.

IF the Newton Bill has not been passed or smothered in Congress by the time you read this note, then take your pen in hand and write your senator and congressman to the effect that you are unalterably opposed to making the Newton Bill a law, and for the reason that it appropriates a large amount of money that is unnecessary and in a measure vicious in result.

"SAVE THE HEART" is a slogan that may well be preached and followed in handling influenza cases. If influenza is suspected, the patient should be put to bed and kept there until convalescence is well established. Remember that those who suffer from influenza are prostrated out of all proportion to the symptoms presented, and the heart suffers in consequence.

THIS is the time of year when we begin to get some complaints concerning failure to receive THE JOURNAL. Almost invariably we are obliged to notify the complainant that upon payment of dues THE JOURNAL will be forthcoming. Of recent years there are not so many delinquents, but there are a few, and each one of them makes more trouble for the executive office, as well as this office than any other ten members.

IT appears that some hospitals ask the surgeon to sign hospital sheets in blank. These sheets are then filled in after the operation by the hospital, and become a part of their records. Legal counsel has pointed out that a doctor should read every operative sheet before it is signed, and "if he signs them in blank and errors occur, he will be without defense in a malpractice action."—*Wisconsin Medical Journal*, July, 1928.

EVEN President Coolidge in his warning against paternalism to which socialized medicine if carried to an extreme eventually would lead, is reported to have said, "We believe that the personal practice of medicine is safer in the hands of the private physician than in those of the state." Such is sound advice, and is well worth heeding by those who would throw us pell-mell into the general hopper of socialized medicine.

WE NOTE that the editorials and editorial notes in THE JOURNAL are copied widely all over the United States. We appreciate the compliment, but we would appreciate it more if the various periodicals that reproduce our comments would give us credit according to editorial custom. One journal has copied our editorial notes more than once, and palmed them off as original. Some of these days we are going to be like the Irishman and "name names"!

WHO has not heard of Chichester's Pills, and the little red booklet entitled "Relief for Ladies" that was used to further the sale of Chichester's Pills? Now comes a news note from the government to the effect that after a seven-year court battle Chichester's Pills have been declared false and fraudulent, and the advertising false and fraudulent. The decision will affect approximately forty similar cases that are now in the United States District Court.

PHYSICIANS will be doing a duty to their patients if they utter a warning concerning the dangers of the indiscriminate use of ultraviolet ray machines. Right now there is a great fad for sunburning, either in the sunlight or by ultraviolet ray, and already many ill effects have been reported as a result of overdoing the matter. It is the old story of overdoing a good thing, or, in other words, not following the wise injunction of "moderation in all things."

THE county medical society should be the center around which all medical affairs gravitate. Staff meetings of hospitals should not take the place of county medical society meetings, and in fact ought to be of such nature as not to detract from the work of the county medical society. Interesting case reports may well be carried over to the meeting of the county medical society where all may join in the discussion rather than limit it to the few connected with the hospital staff.

Now we have an inquiry as to how many doctors smoke. No doubt the information will be used in some sort of a tobacco advertising campaign. Probably a great many physicians will not answer the inquiry, and in consequence the statistics may be misleading. On the other hand

there will be a large number of weak-minded doctors who will answer the inquiry, though for what reason none of them will be able to tell. The average doctor may wonder when there will be an end to the questionnaire fad.

THE other day we picked up a book and in it found the following sentence: "In this book there is nothing pornographic." Not being as smart as some others we consulted the dictionary to find out what was meant by "pornographic" and closed Webster's handy volume with the remark, "Why couldn't they have said, 'In this book there is nothing smutty'?" Those aspiring intellectuals who make a practice of learning a new word every day should appropriate pornographic. They should make a great hit with that word, for few will know what the intellectual is talking about.

ATTEMPTS to collect a bill for professional services rendered may stimulate the filing of a suit for malpractice by disgruntled dead-beat patients, but you can bet a dollar to a punched nickel that also mixed up in the case is an envious, back-biting physician who takes special delight in causing his confreres trouble. Sometimes when he is asked to back up his convictions in court he is mean enough to continue his opposition to his confrere, but more often he turns yellow and denies all connection with the case, though secretly gloating over the fact that the matter has attained publicity.

IN northern Indiana a man and his wife are suing a doctor for \$25,000 damages on the ground that the administration of a narcotic during the man's illness caused him to become a narcotic addict. It is not shown in the complaint that either an excessive amount of narcotic had been administered, or that it had been given over a prolonged length of time. Of course nothing will come of the suit, but the incident only goes to show how little reason there is for many of the malpractice suits that are brought against physicians. It also indicates the necessity for carrying malpractice insurance.

DR. WHITEFIELD BOWERS, of Michigan City, Indiana, is getting up an Indiana World War Medical History for Indiana. He desires that all doctors who served in the World War shall furnish him with complete information, including full name, address, date of birth, place of birth, parentage, family, schools attended and degrees, dates of entry and discharge from service, outfit or outfits, rank, promotion, history of service and any other items of special or historic interest before, during, or after the war, by himself, organization or community, including honors, civic or professional, or service.

MEDICAL journals have had little to say concerning the complaint of one signing himself "Howard W. Ambruster" who says that our pharmaceutical houses are misbranding ergot, and that the secretary of the United States treasury is permitting such deception. Why should this man Ambruster be spending so much money in spreading his propaganda? There must be some other reason than a desire to correct a manifest wrong, but for his benefit we may say that we have the utmost confidence in the honesty and integrity of the Secretary of the Treasury as well as the various leading pharmaceutical houses of America.

DAVID HAREM said, "Do unto others as you would be done by, but do the other fellow first." This seems to be the attitude of some physicians when it comes to a question of ethics. To steal a confrere's patient is one thing, but to discredit and even bitterly condemn all that has been done by the confrere is still worse. And yet that is something that not infrequently occurs among supposedly high-class medical men. Our medical societies ought to be the means of bringing medical men in closer contact socially and professionally to the end that a better feeling is created and a spirit of jealousy or antagonism suppressed.

IN an editorial in a recent number of the *Pennsylvania Medical Journal* attention is called to the inconsistency of county medical societies supporting the policy of the state medical journals, which forbids the acceptance of objectionable advertising for the state journal, and yet winks at the policy of the editor of a county medical society bulletin which permits the acceptance of the rottenest kind of medical advertising. Of course the excuse usually made is that the publication needs the money, but why in the name of common sense should the need of money justify the adoption or sanction of a policy that is opposed to all the rules of honesty and decency?

MARSHALL, Michigan, is a small town and yet it boasts several of the most extensively advertised medical fakes, and we sometimes think that one company owns them all but operates under different names. At all events, Marshall, Michigan, has no reason to be proud of the notoriety given it by its medical fakes, one of the most harmful of which is the one that blatantly promises to cure a rupture without the use of the knife or truss. We always have believed that there were laws in every state governing the matter of obtaining money under false pretenses. Evidently such laws do not apply to the rank medical fakes of which Marshall, Michigan, has more than its share.

THE Ohio Board of Medical Examiners recently asked the question, "Give the contraindications

for tonsillectomy." If the conditions in Ohio are anything like they are in Indiana the student answering that question would say very promptly, "there are no contraindications except that perhaps the operation should not be performed on the new-born or those past ninety years of age." In fact, ten years from now if any person in Indiana can be found who has reached the age of seventy-five and has not had his tonsils removed he probably will be exhibited as a curiosity. It looks as though the rule followed in almost every community in Indiana and probably many other states is, "Let no tonsil escape."

ONE of the vicious tendencies of the present time, and which seems to be getting worse instead of better, is the practice in some communities of making people unnecessary objects of medical charity. This tendency is reflected in the granting of general charity to those not deserving of such consideration. In consequence we are adding to the number of people who unnecessarily become dependents upon the community with resulting increase of taxation for their support. We might go a step further and say that pauperizing people and making them dependents, with accompanying loss of self-respect, also adds to the crime tendency. Why cannot all benevolent individuals and institutions see the matter in this light?

THE Indiana Legislature has adjourned, and all Indiana residents are breathing a sigh of relief. As usual some good and some bad legislation has been placed on our statute books. As usual, personal and corporate influences have played a part in procuring or preventing certain legislation. Scarcely any bill presented in either house of the legislature was considered on merit. However, what occurs in Indiana occurs in every other state, so we perhaps suffer no more than residents in any of the states. So far as legislation pertaining to any phase of medical practice is concerned, things went off fairly well. Nothing of consequence resulted, or was altered from existing legislation in which physicians are interested. Therefore, all in all, we have just cause for thanks.

PHYSICAL therapy has been advertised in a most extravagant way by the manufacturers, and occasionally the representations have been so fraudulent and misleading as to arouse the ire of medical editors. Now comes a leading physical therapy apparatus manufacturer who says, "There has been evidence for some time of fairly definite opposition on the part of certain members of the American Medical Association to the type of semi-commercial literature represented by our magazine, *Light Therapy*. Since our very existence is one of service to the medical profession, we have no wish to continue in the face of the

slightest criticism." The company is therefore discontinuing the publication of its magazine. We take off our hats to the company that will admit the error of its ways!

INDIANA physicians are being bombarded with Radithor literature, put out by the Bailey Radium Laboratories, and already we are receiving inquiries as to the nature of Radithor and the trustworthiness of the claims that are put forth for it. Several months ago we published a short note informing our readers that Radithor is worthless and a species of quackery put out by the Bailey Radium Laboratories, long noted for quackish practices. At the present time the particular appeal is based upon alleged rejuvenation results procured through the use of Radithor which seems to consist of nothing more than plain water, although it is claimed that the water has been charged with radioactive substances. As the *Journal of the A. M. A.* says, "the physician who would order Radithor must be weak not only in medicine but also in morals."

MY, my! We learn that six state medical associations have annual dues of twenty-five dollars or more, and one state charges its members fifty dollars per year. We happen to know that the physicians in those states do not get very much for their money, and we have just been wondering about the kind of a yell the Indiana physicians would put up if they had to pay into our state medical association anything more than the eight dollars they pay now, and for which they get splendid return in the way of an organization that is sponsoring many activities for the benefit of the profession of the state, not the least of which is medical defense in malpractice suits, subscriptions to THE JOURNAL, representation in our annual sessions, and a part in moulding public opinion through our publicity bureau. Certainly, Indiana physicians get a lot for their money.

IN Wisconsin a physician, acting as surgeon and consultant, sent his bill for services direct to the patient, and was met by refusal to pay on the ground that the bill had been paid to the attending physician. In commenting on this case, the *Wisconsin Medical Journal* quotes the Wisconsin statutes on fee splitting which provides that anyone rendering a patient any service, advice, or assistance shall render an individual statement or account of his charges therefor directly to such patient, distinct and separate from any statement or account from any other person, firm or corporation who may have rendered services to the patient. It may be that they have fee-dividing in Wisconsin, but at least the practice becomes a rather dangerous one in that state if any person insists upon conducting all transactions with medical men in strict accordance with Wisconsin laws.

WE ARE getting just a little peeved at prominent men who present their papers and addresses before our Association and later, sometimes after we have gone to the expense of putting the paper or address in type, ask that their contributions not be published, usually on the ground that the papers or addresses are to be used elsewhere. In the first place, it should be considered an honor to be invited to present a paper or address before our Association, and in accepting the invitation the guest should consider himself morally obligated to conform to our rules concerning the publication of a paper or address. We sincerely hope that our program committee will make it quite plain to those addressing the Association that their contributions to the Evansville session will be considered as property of the Association and as such will appear in the printed transactions of the session.

THE United States Post Office Department has been urging everyone to use air mail, but until there is greater perfection in the service it hardly will pay business men and others off of the main air mail routes to pay the extra postage on the supposition that mail will be delivered at its destination quicker. As an example of the inefficiency of the service we refer to the following incident: An ordinary traveling bag sent by parcels post, and a first-class letter sent by air mail, both addressed to an Indiana city, were mailed at San Diego, California, at the same time. The traveling bag reached its destination at the same time that the air mail letter was delivered. No doubt the story would be different if the destination had been Chicago or New York, or some place on the air mail route. It ought to be different, no matter what the destination, but it isn't.

DR. HIDEYO NOGUCHI, who recently died of yellow fever, left an estate of only twelve thousand dollars, with his widow as sole beneficiary. The Rockefeller Institute for Medical Research plans to provide for her financially.

Dr. Noguchi never worshiped the almighty dollar, but always kept his soul in the larger field of his own choosing to work for the best interests of humanity for this and all generations to come.

The name of Noguchi well merits the plaudits of the entire world and of the medical profession in particular, as reflecting the highest ideals that appeal to every man who becomes a physician.

He spent an entire lifetime in working for the good of others, immolating himself, and finally succumbed to that disease the eradication of which had attracted his best efforts. His record is his proudest monument.—*Penn. Med. Jour.*, October, 1929.

So far as we know there isn't an office of the "Class Health Fume System" in Indiana. How-

ever, it does have an office in Rochester, New York, and aside from the fact that we are satisfied that the enterprise is not deserving of recognition by reputable physicians, nor the public either for that matter, we are interested particularly in the letter sent out by the enterprise to physicians in which the following statement occurs: "We also wish to state that everyone is due a remuneration for services given, and we will pay to each doctor sending patients to our institution twenty percent on treatment given. Please send orders for treatment on your letterhead so proper credit can be given. Check for same sent on the first of each month." Every self-respecting physician will throw such a letter in the wastebasket, though it may be that the new game will find a few willing to play.

WE hope that sensible physicians will not be led astray by the specious pleas of high-pressure salesmen to the effect that physical therapy apparatus not only creates a fine impression with patients but is a great money-maker inasmuch as no patient who comes into the office can be considered as not benefited by some form of physical therapy treatment. In other words, the high-pressure salesman as well as the manufacturers of physical therapy apparatus would have physicians commercialize their practice to the fullest extent. Just how much confidence would the public have in a physician credited with extracting fees by employing a lot of needless if not worthless treatment? Has it come to pass that there is no honor or honesty among physicians? We think we are safe in assuming that a very large proportion of the members of the medical profession will show the door to the high-pressure salesman who preaches the type of commercialism to which we are calling attention.

A MEDICAL man who has written considerable stuff for good, bad and indifferent medical journals, and some lay publications, is announcing a special edition of the book entitled, "Woman, Her Sex and Love Life," and as a premium for the purchase of this book a free copy of another book, entitled, "Birth Control," is to be sent upon receipt of purchase price of the former. Judging from the table of contents, the book ought to have a wide sale among young girls and women, and perhaps a few inquisitive boys and men. We are under the impression that altogether too much is published concerning sexual relations and birth control, if we are to show any regard for the health and happiness of the people. It is probably true that not enough physicians are giving sex advice to those who should have it, and not enough are seeking sex advice from their physicians, but the fact remains that a free discussion of the subject for lay distribution, not always in a humane

and scientific way, is bound to do an indefinite amount of harm.

EXCLUDING street noises in congested business districts is closely allied to the problem of providing adequate ventilation for offices, factories and other buildings. Were it not for the noise the most economical and satisfactory method of providing fresh air would be by the process of opening windows, but every day new evidence appears to substantiate the belief that noise causes nervous strain and reduction in efficiency. In addition to this, noise must be blamed for considerable loss of health as the result of workers being confined in stuffy rooms, due to the obvious fact that adequate ventilation frequently means an increase in the noise that enters with the fresh air. Now the *Scientific American* for January, 1929, describes a ventilator which detracts the noise. Double reflectors permit the air to enter the room but excludes the sound waves from noisy city streets. Office workers will welcome such a practical means of excluding the roar and clamor of the machine age and not reducing the necessary supply of fresh air.

Two chiropractors of Shreveport, Louisiana, have been convicted of practicing medicine without a license. The evidence showed that no matter what the patient's ailment, the treatment given was massage in some form, though in addition to the rubbing, patients were given some additional medical treatment of the hit-and-miss type. They were fined fifty dollars and sentenced to ten days in jail. It is unfortunate that some of the victims did not prosecute for obtaining money under false pretenses, as also for malpractice, or perhaps the use of undue physical violence. Why doesn't the public see the inconsistency of permitting anyone to rub, pound or jerk, or prescribe medicine for sick persons without having the slightest knowledge as to the nature of the disease with which the patient suffers and still less knowledge as to the therapeutic actions or indications for the use of the drugs prescribed. We often have wondered if physicians are doing their full duty to the public by not more generally and fully exposing medical pretenders.

A LOS ANGELES woman lost her pet wire-haired terrier and advertised in the papers and police bulletins to the effect that she had offered a reward of \$100 for the return of the animal. The advertisement brought to the woman a postcard from the New York Antivivisection Society, 1860 Broadway, New York City, which said, "If you have not already found the dog advertised, we suggest that you search in the nearest medical laboratory, as animals are often stolen and sold for experimental purposes. Do not let them bluff

you off, but be persistent. You may be a believer in vivisection, in which case you would be as willing to have your own dog sacrificed as another, but if not you will justly wish to save your dog from torture."

Such is the kind of misrepresentation and maudlin sentiment that stirs some people to action in objecting to humane and legally controlled animal experimentation for the benefit of not only humankind but the animal kingdom as well. Too bad that antivivisection societies cannot be compelled to stick to the truth!

WE understand that the county society secretaries of Michigan held an annual meeting at the A. M. A. headquarters in Chicago, all expenses of the meeting being paid by the Michigan State Medical Society. Such a meeting was productive of very great good, as it enabled the secretaries of the county medical societies to see what a wonderful plant organized medicine possesses in Chicago and what a diversified and thoroughly constructive piece of work is being done by the A. M. A. In all probability everyone attending the meeting went home with a clearer conception of what organized medicine is attempting to do for the good of the individual physician as well as the public at large, and no doubt he returned home a better booster for organized medicine. We offer the suggestion that the example set by Michigan might be followed with profit by Indiana, and while it might cost several hundred dollars to pay the actual expenses of the secretaries in attending such a meeting, it would be money well spent. (Recently Wisconsin also has held a secretaries' meeting at the A. M. A. headquarters in Chicago.)

GRADUALLY the teaching institutions are being "smoked out" and forced to take a definite stand concerning their position in relation to state medicine, or the practice of medicine by institutions. In the August number of the *Illinois Medical Journal*, a leading editorial asked the question, "Is the University of Illinois beginning to enter into the practice of medicine?" The intimation is made that the institution is on the verge of engaging in state medicine. This has brought forth a reply from the dean of the University of Illinois to the effect that the University is unalterably opposed to state medicine and under no consideration will it make any move in that direction. In fact, it is definitely stated that every effort is being made to limit the services of the dispensary of the University and hospital to the needy poor. This open objection to state medicine in any form is expressed by not only the dean but the president of Illinois University. We ought to "smoke out" some of the other universities and get an expression of opinion from them

so that they will be placed on record in this very vital question.

WELL, well! We have National Prohibition, on paper, and Indiana is a bone-dry state, on paper, but there are any number of reasonably good cocktails with a liberal alcoholic content that are sold openly as tonics and tissue-builders. For instance, Rinault Wine Tonic, advertised as a tonic and system builder, announces on the label that it contains not more than twenty-two percent of alcohol. Our shrewd guess is that it does contain twenty-two percent of alcohol, and after tasting the tonic we are under the impression that it comes very near being a fair sherry wine, with perhaps the addition of some aromatics which make it not an unpleasant cocktail. In view of the fact that this tonic has a wide sale in case lots, we are led to believe that a great many people are considering the tonic as a good alcoholic appetizer. The old Hostetter's Bitters, used by so many deacons as a stomachic tonic, was a potent cocktail with its forty-six percent alcoholic content, as announced by chemists in the olden days, but we believe this new "prohibition" tonic is a more palatable cocktail and quite as potent if taken in sufficient quantities.

IN an earlier number of THE JOURNAL we had an editorial note concerning the use of barbitol to offset the toxic effects of cocaine. Unfortunately the item was side-tracked and used as a filler in the advertising department, so we are calling renewed attention to this matter because we think it is of extreme importance. In the Harper Hospital in Detroit it is the custom to administer five to ten grains of barbitol for patients about to be operated upon under local anesthesia, and it is found that confusion, restlessness and depression following the anesthesia were absent from these patients. In dogs, the convulsions and other phenomena produced by massive doses of cocaine were quickly controlled by intravenous injections of soluble barbitol and this treatment may be repeated if necessary. Ten grains of sodium barbitol, given by mouth about one hour before operation, will prevent the development of serious toxic symptoms in most instances. Some patients are given ten grains of sodium barbitol the night before the operation. The procedure is based upon the belief that the toxic effects of cocaine are located in the cerebrum and that such effects can be prevented by hypnotics.

THERE seems to be a growing tendency on the part of a few of our very rich men to consider themselves in duty bound to devote a considerable portion of their fortunes to the public good. In consequence we are hearing more and more of enormous donations to benevolent and philan-

thropic purposes, and of particular interest to us are the staggering amounts donated to the development and operation of hospitals and clinics. This spirit is permeating every community to a more or less extent, the amount of the donations being in direct proportion to the wealth of the donors and the needs of the community. If judiciously and intelligently used these contributions will make it possible to render a very much better grade of service to the public. Perhaps the medical profession has reason to fear that the splendidly endowed institutions for the care of the sick and suffering, and with their power of dictating as to the time, policy and compensation for services rendered, indicates the eventual doing away with the independent practitioner of medicine except in a limited and very circumscribed sense. It is another cause like state medicine, and it is a question if both will not have some bearing on future medical practice.

THE frequency with which medical editors are asked to publish gratuitously so-called news notes that in reality are advertisements for some money-making enterprise is getting on our nerves. For instance we happen to know that there are one or two physicians who are sponsoring various post-graduate courses, clinics, or conventions on the theory that they are of educational value to physicians but at a good enrollment fee from all who attend, and we believe that the promoters are profiting unduly in connection therewith. In fact, we are informed that there are a few physicians acting as promoters for these various enterprises who do nothing else and are making a comfortable living at the promotion game. We expect to carry news notes and information concerning all legitimate enterprises that have to do with the advancement of the practice of medicine, but we are through with the publication of promotion literature as a gratuitous present to those physicians who are promoting largely for their own profit and in doing so imposing unmercifully upon the leniency and graciousness of medical editors. We admit that we have been bled by the leeches in the promotion game more than once, but we serve notice now that we are going to try to avoid being bled in the future.

WE have had some pertinent things to say concerning the inconsistent policy of the *New York State Journal of Medicine* in carrying advertising that is rejected by a majority of the state medical journals as well as the *Journal of the A. M. A.* Now comes an announcement from the editors of the *New York State Journal of Medicine* which, to be perfectly frank, is enough to make a horse laugh, announcing that all advertising copy will be edited by the editor and that copy devoid of extravagant statements or misrepresentations will

be acceptable. In fact it is indicated that their hard-and-fast rule will be followed in accepting advertising as long as the editor can polish up the copy so that it offers no misrepresentation. Of course we assume that if Lydia Pinkham's Vegetable Compound is advertised under the bare name, and with no misrepresentation as to its curative value, the advertising of that proprietary remedy will be acceptable to the *New York State Journal of Medicine*. Anyway, as we have said before, we would just like to know how far the rank and file of the medical profession in New York will support the advertising policies of their state journal. To our notion the editors and managers of the journal in question should be ashamed of the policies they have adopted and are following.

THE exaggerated and even dangerous advertising campaign put forth by a variety of manufacturers in the interests of better health probably will kill itself through its nauseating extravagance, which will be recognized by the public, but in the meantime much harm has been done and the advertiser has obtained his object of fattening his purse. The virtues of yeast in promoting health have been recounted in full page advertisements in all of the leading lay periodicals, at an expense of thousands upon thousands of dollars, and the health promoting qualities of Lucky Strike cigarettes were said to have the endorsement of over twenty thousand physicians who if they did give such recommendations proved themselves to be a lot of silly asses of the pale blue variety. Evidently the howl that went up from the medical press concerning this false testimony has resulted in a change in tactics, for now Lucky Strikes are advertised to keep the weight down by destroying the appetite for sweets. Let us hope that medical men never again will be caught in the trap of either manufacturer or advertising agency by offering recommendations, without thought or reason, that are to be used commercially. Anyway, how much confidence will the public place in medical testimony that says that cigarettes are good for a cough or improve the heart action?

THE Virginia State Medical Society, through its council, has passed a resolution approving the work of the Sheppard-Towner Act and asking for a continuance of the Act. We are just wondering what sort of influence was brought to bear to cause the Virginia State Medical Society to take the action that it did, and we note that the council seems to have been largely influenced by its president-elect who probably has listened to the siren song of certain over-enthusiastic welfare workers. We scarcely can conceive of a favorable opinion concerning the Sheppard-Towner Act by the rank

and file of the medical profession of Virginia, and it would be interesting to know if a majority vote of the medical men of Virginia would support the council's actions. We are willing to admit that some good has been accomplished by the Sheppard-Towner Act, but the good accomplished has not been worth the enormous amount of money that has been spent in securing it, and there have been so many objectionable features in connection with the enterprise that offset all of the good that has been accomplished, even if it had cost far less in money. Furthermore, if our federal government is going to take any hand in solving health problems and educating the public concerning mother and infant welfare, it should be done through the United States Public Health Service and not through a department devoted to agriculture or child labor.

HERE in Indiana where physicians are not permitted to prescribe or have in their possession even a teaspoonful of alcoholic beverages, no matter what the indication, it makes us smile and in some instances arouses our indignation, to learn that our confreres in Ohio duly passed a resolution asking the federal prohibition administrator for Ohio to furnish additional prescription books covering liquor prescribing, on the ground that more liquor is required at the present time as a direct result of the unusual prevalence in Ohio of influenza and other diseases incidental thereto. Of course, the federal prohibition administrator took due notice of the resolution, and no doubt increased the number of prescription books for our Ohio confreres. As if to rub it in, Indiana physicians quite recently have received a letter from a New York concern quoting prices on government bond liquors available to physicians desiring to prescribe the same in their practices. Government guaranteed bonded whiskey of first quality at three to three dollars and a half per pint, for medicinal purposes, *but not available to Indiana physicians*, is enough to create a little chafing in view of the freedom from restriction that is offered physicians outside of Indiana. We have influenza in Indiana, but the Wright Bone Dry Law of Indiana does not recognize any pathologic condition in which medicinal liquor either is indicated or would prove beneficial. We never did and never will consider this discrimination as fair or logical, or in the interests of real prohibition.

REDUCED intraocular tension (hypertonia bulbi) as a diagnostic feature in diabetic coma is reported by A. J. Patek, in the *Journal of the A. M. A.* for February 9, 1929. Five cases are reported. The soft eyeball apparently comes on during the attack of coma and disappears with the disappearance of the coma. The symptom is

not mentioned in the books on ophthalmology so far as is known. As to the frequency and constancy of the manifestation and its diagnostic value, not enough is known to justify a definite opinion. Some authors claim specificity for the sign; that is, that soft eyeballs in coma prove the coma to be diabetic in character. This opinion seems to be shared by Patek, who successfully employed the sign as a differentiation in cases of coma that he saw. Various authors quoted are of the opinion that the soft eyeball is not present in every case of diabetic coma, but that when it is present, probably not infrequently, it is of very great diagnostic importance. In summarizing his discussion of the subject Patek says that "a soft eyeball is not found in comas other than those of diabetic origin, though constancy of this sign in diabetic coma is not conceded, even though it is present with striking frequency. It is absent in diabetic acidosis without coma. It is most pronounced at the height of coma and quickly recedes as the coma is overcome." The author thinks that the manifestation is a neglected clinical observation and that as a diagnostic feature it has its specific value. He asks for more attention to the subject on the part of those who may be called in coma cases.

HERETOFORE we have refrained purposely from offering any comment concerning the death of Dr. Dalton Wilson, anesthetist at Welborn Hospital, Evansville, Indiana, as the direct result of the explosion of ethylene gas, as we desired to have more particulars. No one seems to know how or why the explosion occurred, but it caused the prompt death of Dr. Wilson, the anesthetist, and injured the colored porter who was in the room at the time. Representatives from the ethylene gas factories offer what seems to us to be a rather far-fetched theory to the effect that the static electricity generated by the doctor in walking about produced a spark which set off the ethylene gas. However, no matter what caused the explosion, the fact remains, as we pointed out in THE JOURNAL many months ago, that ethylene gas is an exceedingly dangerous anesthetic to fool with in any operating room, and the surprising thing to us is that more accidents, such as the one mentioned in this note, are not recorded. It may be argued that even ether is dangerous in that explosions may occur when used in the presence of open fires or grates, or when a flame is about, but ether never did have the potential dangerousness possessed by ethylene gas. We understand that the manufacturers of ethylene gas declare that it never should be used in any operating room unless the barometric pressure is just right, in which case it is perfectly safe. However, how many hospitals are run with a barometric pressure that at all times is suitable

for the administration of ethylene gas, even admitting that under proper barometric pressure lies the element of safety.

THE columns of our daily newspapers furnish ample evidence of the ignorance and spirit of intolerance that occupies the minds of many lay persons. Just now the question of birth control seems to be the leading one for discussion by persons with lopsided brains, though what is said pro and con is about as amusing as a copy of *Judge*. What puzzles us most is why editors of lay papers will permit patently sexual perverts to express their views openly and sometimes in a manner that is fairly nauseating. Throughout this discussion on birth control is another vein that touches upon the incompetency of the medical profession, and some lay writers go far afield from the subject in attempting to prove that members of the regular medical profession not only are ignorant for the most part as to the cause and cure of disease but that they are naturally dishonest in intent in carrying out their professional work. It strikes us that editors of lay papers ought to put a stop to such uncalled-for abuse. The medical profession is an honored profession, and lay editors know that some of the best minds are represented in members of the medical profession who are working unselfishly in the relief of humanity's ills. The profession as a whole deserves not only the respect but the protection of the lay press instead of the encouragement of the kind of lambasting that is given the ordinary bootlegger. It may be that the columns devoted to "private opinions publicly expressed" is in charge of a subordinate in the ordinary lay newspaper office, but the editors and managers themselves should keep in touch with policies of the enterprise and prevent a miscarriage of truth as well as justice.

SOME punishment should be meted out to the druggists and others who are selling reducing remedies to young girls and women with the result of making mental and physical wrecks of not a few of them. Recently we have heard of a few fat men who have been buying reducing capsules from druggists, and who have paid a severe penalty in consequence. The Indiana legislature would have done a wise thing had it passed, at its recent session, a law making it a criminal offense for druggists or anyone else to sell reducing remedies of any kind. We punish bootleggers who sell poisonous whiskey; and we even punish the poor devil who drinks the whiskey whether it is poison or not, but we let druggists go scot free in their nefarious practice of selling and recommending, even advertising openly in the lay press, reducing remedies that are if anything more dangerous and already have produced more serious

consequences than all the bootleg whiskey that is sold in Indiana. One Indiana physician who has been called upon to treat quite a large number of girls and women whose general health has been greatly impaired as the direct result of taking reducing capsules furnished by a certain druggist, has no hesitation in saying that the druggist deserves prosecution more than the average bootlegger, and that if there is any road through which he can be reached by the medical law which requires license before practicing medicine that law should be invoked to stop the damnable business carried on by that druggist as well as all others who sell reducing remedies. Incidentally, when Rev. Shumaker gets out of prison he could find worthwhile work in trying to suppress the sale of reducing remedies, and we believe that it would be found more generally commendable than his previous efforts to stamp out the demon rum.

MUCH of the distrust and lack of confidence accorded physicians by the laity is due to lack of frankness in admitting limitations in knowledge and ability. There is altogether too great a tendency on the part of many physicians to pose as specialists in every phase of medical practice, whereas they come very far from being master of any when they assume that attitude. Thus a physician who is perfectly competent to act intelligently and trustworthily in the treatment of general diseases, or perhaps the diseases or conditions belonging to some speciality, is not qualified to talk or act intelligently concerning other conditions which have received scant attention at his hands, although he may presume to act in the capacity of an all-around physician. Thus the general practitioner may look wise and advise the patient as to the pathology present in some condition that deserves the attention of a specialist, and he advises recklessly and ignorantly as to treatment, and gives this advice irrespective of any contra-indications. Thus the surgeon altogether too often is called upon to operate late when he should have been called upon earlier and would have been called upon earlier had it not been for the advice of some general practitioner who has recommended procrastination in the face of a condition that from the first was surgical and in which the best results would be secured from surgical intervention. In short, it is a pretty good thing for physicians to make an endeavor to know some things well and be prepared to give intelligent and trustworthy advice based upon their knowledge and experience, but to be frank enough to admit their incompetence when the conditions require the services of someone more skilled than they are in caring for the particular condition requiring attention. No physician ever lost anything by frankly admitting that there was something he did not know. In fact, patients like frankness, and the physician who is not frank as

well as honest in admitting his inability to handle any and all conditions that confront him in medical practice invariably loses the confidence and respect of patients sooner or later.

How nonsensical and inconsistent it is to have a layman as coroner. If ever there was a position requiring the knowledge of a trained medical man it is that of coroner, and yet in some counties of Indiana laymen have sought and been elected to the office. You might just as well say that a feeble-minded person can serve satisfactorily as superintendent of schools.

Furthermore, politics should not enter into the selection of a coroner, and the *Journal of the A. M. A.* gives reasons that are summarized as follows: "A politically elected medical coroner finds himself confronted with embarrassing questions of political patronage. His personal and professional conscience is constantly tantalized by demands from his political associates and backers. One day he is asked to omit an autopsy for the sake of the family of the deceased or to accommodate a politically important undertaker. Then comes the request to falsify his statement as to cause of death in order that the family of the chief political henchman may have the benefit of the workman's compensation law, to which they might not be entitled if the truth were told. To save the fair name of someone who had died from criminal abortion or from suicide and to protect the family from the stigma attached to such circumstances, he is asked to suppress information. Sometimes his aid is sought to give the family of a deceased person the benefit of an insurance policy that covers death by accident, or to enable the insurer to escape liability under a policy that does not cover suicide. While the motives that may tempt a coroner to juggle with the orderly administration of his office and with its records may have a political origin, monetary considerations may enter into such transactions, politics serving merely to embolden the wrongdoers by giving them an assurance if protection is discovered. Also we must consider that as long as the office of coroner is an elective one, its duties will be unsatisfactorily performed." To which we also may add that the duties will be performed less satisfactorily in those instances where lay individuals are elected to the office of coroner.

"SLIM FIGURE BATH," another elaborately exploited piece of quackery for fooling the fat, is discussed and condemned by the Bureau of Investigation in the *Jour. of the A. M. A.* for February 9th. Nude girls dancing across the page, and naked women in a bath tub and other features of female nudity in black and white and colors, characterize the advertising of the "Slim Figure Bath," which is described in advertising as "the

sensation of Europe," and which by its mysterious action will reduce the weight regardless of diet. Unfortunately a few prominent business men of Chicago have been induced to take stock in a company to exploit this piece of quackery, and even the *Chicago Tribune* was roped in to carry a full page of advertising, though the medical writer on its editorial staff, the well-known Dr. W. A. Evans, when asked as to the composition of "Slim Figure Bath," whether harmful or not and whether he would recommend it for reduction of fat, replied that he did not know the composition, whether it was harmful or not, but that he did not know of any substance that could be used in bath water and really reduce weight. To the final question as to whether he would recommend it or not, he answered with an emphatic "no," all of which reminds us that the *Chicago Tribune* ought to be in better business than carrying full page advertising of quackery that its editorial force unqualifiedly condemns. An analysis of the ingredients used in the "Slim Figure Bath" shows that essentially it is a mixture of corn starch, borax, baking soda, tartaric acid, and common salt. For this inexpensive mixture the public is asked to pay \$1.00. As the *Journal of the A. M. A.* well says, it is the newspaper which shares the profit and furnishes the contact between quack and victim. It is worth noting to those who would be led astray that they can get exactly the same result by using the ordinary bath tub and plain hot hydrant water. There is an old saying that "Advertising pays", and Barnum is reputed to have said that the "Public likes to be swindled," so of course there will be suckers who will bite at the bait thrown out by the company exploiting the "Slim Figure Bath," and there will be promoters and newspaper owners who will share in the profit secured from the swindle.

AGAIN we have received a visit from a representative of the Christian Science Committee on Publication from Indianapolis, who complained about some of the things we have said concerning the new branch of the Christian Scientists calling themselves the Christian Science Parent Church. Of course the claim is put forth that no attention should be paid to a lot of dissenters who, our caller said, had been deliberately expelled from the Christian Science church.

Really, what hurts most is the truth as told by the dissenters, in which attention is called to the tragedies that have been permitted in the name of Christian Science by its overzealous devotees. The dissenters say, and of course they utter a truth that we long have recognized, that "since Mrs. Eddy's death Christian Science practice has become very largely a commercialized faith cure. The record of disease and death among Christian Scientists during the last few

years is appalling. Because of the superstition that the use of drugs is an evil, and the employment of medical aid tantamount to a confession that Christian Science had failed, the majority of the adherents to that faith turn to medical assistance only as a last resort, usually secretly and with the depressing conviction that they are committing a positive sin. Such an attitude tends to nullify the work of the physician and depletes the patient's capacity for recuperation. Secretly the doctor is called only when death is considered imminent, and to prevent if possible the embarrassment of an inquest." The dissenters further say that "it is a recognized fact that in Christian Science a drug may be the medium through which the common faith and hope of the majority of mankind expresses itself. In the personal experience of Mrs. Eddy there came a time when neither her own nor her followers' unaided faith were sufficient to relieve her of serious suffering. Understanding the power of the faith of the majority of mankind in medical science, she decided to utilize it and gratefully availed herself of the services of reputable physicians on various occasions. She was far in advance of her followers in practical application of real Christian Science. Had her example been followed intelligently by her students, Christian Science practice would today hold a higher place in the general estimation of the world."

A WELL-KNOWN dermatologist, I. R. Pels, in *Clinical Medicine and Surgery* for January, 1929, says that the etiology of acne has as yet not been clarified, and the treatment still remains symptomatic and palliative. Up to date, there has been found no specific, though the dermatologist in question offers this gem of hope to the patient, that "acne disappears spontaneously as a rule at the age of thirty or thereabouts." The same author says that urticaria may or may not be due to the ingestion of proteins, and that from the therapeutic standpoint not much headway has been made in controlling urticaria. Pityriasis rosæ is another disease about which dermatologists know little as to etiology, and it is sufficient to treat the disease symptomatically even though the disease is self-limited and has an average duration of about five to six weeks. Nobody as yet knows much about psoriasis, especially as to its etiology. The malady occurs chiefly in patients ordinarily in good health. It probably is due to some form of sensitization not as yet well understood. There is no specific in the treatment of the disease, though the author thinks that roentgen therapy, especially when used in selected cases, is the method of choice for many an obvious reason. The author also says that he is unaware of a real specific in the treatment of ringworm. Known success has been obtained through the use of anti-

septics and such stimulating agents as the roentgen ray and ultraviolet radiation. Treatment of eczema is pronounced complicated. The individual and not his eruption should be studied in an attempt to find a clue to treatment. Perhaps the most hopeful local agent, used together with palliative and symptomatic measures, has been the roentgen ray. Physiotherapy, such as the roentgen rays, radium, electrocoagulation, and desiccation, ultraviolet and infra-red lights, carbon dioxide, liquid air, electrolysis, etc., is reported by the author as not being of great moment or of striking value.

Altogether this commentary by a dermatologist of considerable note seems rather pessimistic, and yet the average physician who finds so many of the dermatological conditions so obstinate and difficult to correct by any form of treatment will quite appreciate the reasons for the pessimism expressed. In fact, when you come right down to brass tacks isn't it a fact that much of the treatment of dermatological conditions is empiric?

A NATURE doctor in one of our Indiana towns announces in the daily press that he "has purchased one of the latest up-to-date electric outfits to use in reducing tonsils to normal without an operation; also in adenoids, hemorroids (his spelling), goiters, and female trouble." It sounds interesting to us to hear that a nature doctor is going to monkey with hemorrhoids and female trouble with any kind of an electric apparatus! Well, anything to get the money, and the people suffer! Another Indiana doctor says that in addition to his eye, ear, nose and throat work, which he has been doing in the past, he will take up the practice of general medicine and surgery. In other words, here is a fellow who is a "general specialist," and he might go a step farther and follow the pattern set by one of Indiana's advertising quacks who says in his newspaper advertising, "There is no disease I cannot cure." From the February number of *The American Mercury*, we quote some interesting lay advertising, and here is one from an Evansville, Indiana, woman who seems to have obtained great benefit from a handkerchief that has been blessed or otherwise endowed with curative powers. "Received your handkerchief and booklet. From the time I pinned the handkerchief on my little girl, she has not had any symptoms of asthma, and I have used it on my little boy for colds and such; also on the little girl for indigestion. Wonderful work. I thank the Lord for his healing power." That ought to increase the sale of handkerchiefs reputed to possess miraculous healing power. From Louisville, Kentucky, comes ministerial advertising as follows: "Hot stuff in the old town. The Rev. H. W. Bromley, Men only, Methodist Temple, Sixth and Broadway, 2:30 p. m. Admit one man or boy."

That ought to bring a crowd, but many will go away disappointed. T. K. Jennett, of Sciota, New York, after announcing that he is a dealer in dry-goods, groceries and general merchandise, completes his advertisement with the following: "Down with rum, tobacco, sin, Sabbath-breaking, none in heaven. Get right with God." A Hot Springs dentist, after announcing in the newspapers that he has been held up there by an attack of inflammatory rheumatism, but has finally decided to make the place his permanent home, concludes his announcement as follows: "Permit me to state modestly (?) that you people have a good reliable dentist in your midst lassoed by the possibility of a rheumatic lapse, and if you fail to give your teeth the attention they deserve you have passed up one golden opportunity not to be repeated, I hope at least by this dentist." Some physicians have an adroit way of advertising themselves, and oftentimes the manner in which they do it cannot be considered to be positively unethical, and yet, to say the least, it is in bad taste. Not a few Indiana physicians, and particularly specialists, have been asked to address various dinner clubs like the Rotary, Kiwanis, Lions, etc., and while giving valuable health information have not omitted the opportunity to give the listeners an idea of the amount of education, training, equipment and experience possessed by the speaker in order to serve suffering humanity intelligently and well. Probably such self-exploitation impresses a few, and yet we doubt if it will have a favorable effect upon the class of people that the average physician desires to secure as patrons. It is service and not newspaper advertising that counts in the long run. Even the merchant knows this.

THE medical policy of the Chicago Medical Society has been formulated by a commission appointed for the purpose. The commission will from time to time submit additional statements covering points not included at this time, so from the *Bulletin of the Chicago Medical Society* we reprint the policy:

Preamble: In order that the public may better understand the aspiration and ideals of the Medical Profession of Cook County, it seems advisable for the Chicago Medical Society, which is the Medical Society of Cook County, to issue a statement of Medical Policy to supplement the "Principles of Medical Ethics of the American Medical Association.

Statement of Policy of the Chicago Medical Society:

1. The Chicago Medical Society accepts the principle that its members are ready and willing to serve all citizens of Cook County, irrespective of their economic status.

2. Medical education and the practice of medicine in all its branches should be controlled by Doctors of Medicine.

3. Medical schools, private, endowed, or government hospitals, tax-supported institutions or departments should not enter upon the practice of medicine in competition with those in private practice.

4. The principles underlying the graduated fee and full fee clinics are economically unsound and fundamentally wrong, whether these clinics are conducted by individuals, endowed institutions, by institutions incorporated for profit or by institutions incorporated not for profit.

Dispensaries or free clinics, whether conducted by government or by welfare or other organization, should in each instance have a Medical Board composed of physicians who are members of the Chicago Medical Society.

The members of the faculties of the medical schools and of the medical boards and staff of the government or other organizations conducting dispensaries or free clinics shall be held responsible for the conduct of the activities of its organization in accordance with the Statements of Medical Policy of the Chicago Medical Society and the Principles of Medical Ethics of the American Medical Association.

5. The institutions, sanatoria, and hospitals in Cook County that are supported by taxation should admit as charity patients, except in emergencies, only those referred by physicians or found worthy of free medical service.

6. All physicians employed in tax-supported departments, hospitals, sanatoria, or institutions, whether on full or part time basis, should be remunerated adequately for the medical service rendered.

7. Free clinics and dispensaries should refuse, except in emergencies, all patients not referred by physicians except those found worthy of free medical service.

8. The words *clinic*, *institute*, *academy*, *cardiac therapy*, *gastro-intestinal therapy*, and the like, are misleading and improper when applied to groups or organizations of physicians engaged in any or all of the branches of the practice of medicine. The proper designation of such groups or organizations is the name of one or more of those active in its formation, plus a phrase describing its scope.

9. The rules and regulations of the American Medical Association for clinical laboratories have been adopted by the Chicago Medical Society and have been applied by it to x-ray laboratories, with the provision that the use of x-ray apparatus for the purpose of arriving at a diagnosis or for therapy in any given case be considered as the practice of medicine; therefore the same regulations

should apply to x-ray laboratories with the following modifications:

"Every x-ray laboratory should be in charge and under the direction of a duly qualified physician who is licensed under the laws of this state to diagnose and treat diseases, and should be qualified to operate and use an x-ray machine."

DEATHS

JAMES H. JOHNSON, M.D., of Connersville, died February 15th, aged fifty-seven years. He graduated from the Chicago Homeopathic Medical College in 1895.

PETER M. COOK, M.D., of Bloomfield, died February 12th, aged eighty-one years. Dr. Cook graduated from the Miami Medical College at Cincinnati in 1883.

EDWARD J. EMMERT, M.D., of Lawrenceburg, died February 3rd, aged fifty-seven years. Dr. Emmert was a graduate of Miami Medical College, Cincinnati, in 1895.

WILLIAM C. FURNEY, M.D., of Sharpsville, died February 4th, aged seventy-five years. Dr. Furney graduated from the Medical College of Indiana, Indianapolis, in 1891.

JOHN C. BAXTER, M.D., of Auburn, died January 20th, aged sixty-seven years. He had practiced medicine in Auburn for thirty-one years. He graduated from the University of Louisville School of Medicine in 1887.

OLIVER K. HARRIS, M.D., of Ellettsville, died February 10th, aged fifty-seven years. Dr. Harris graduated from the Louisville Medical College in 1896. He was a member of the Monroe County Medical Society, the Indiana State Medical Association and the American Medical Association.

ERNEST W. LAYMAN, M.D., of Terre Haute, died February 5th, aged fifty-six years. Dr. Layman was a member of the Vigo County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the General Medical College of Chicago in 1899.

GEORGE W. BUCKLIN, M.D., of Muncie, died February 12th, aged seventy-eight years. Dr. Bucklin was a member of the Delaware County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Bellevue Hospital Medical College, New York, in 1879.

NEWS NOTES AND PERSONALS

THE \$450,000 addition to Mercy Hospital at Gary has been completed and is now in use.

DR. C. L. SLONAKER, of Culver, has been selected by the Culver Military Academy as surgeon to fill the position left vacant by the death of Dr. Reed.

DR. HERMAN L. KRETSCHMER, of Chicago, presented a paper on "Tuberculosis of the Kidney" at the February 19th meeting of the Fort Wayne Medical Society.

A GIFT of \$150,000 to the Neurological Institute of New York has been made by Mr. Edward S. Harkness. All of the work of this institute will be transferred to the Medical Center in March.

AT the February 5th meeting of the Indianapolis Medical Society, Dr. H. B. Mettel presented a paper on "Diabetes Insipidus in Children" and Dr. G. B. Jackson presented a paper on "Sterility in Women."

DR. BERNARD PULSKAMP, of Rome City, recently was honored when the patients and members of the staff of the Kneipp Sanitarium united in celebrating the twenty-fifth anniversary of his service with that institution.

AT the meeting of the DeKalb County Medical Society held January 25th, Dr. A. V. Hines, of Auburn, was elected president, Dr. W. W. Swarts, of Auburn, vice-president, and Dr. K. E. Casper-son, of Butler, secretary-treasurer.

THE Northern Tri-State Medical Association will hold its annual meeting in Toledo on Tuesday, April 9, 1929. Dr. Beauchamp, of Lima, Ohio, is president of the organization for this year, and Dr. N. W. Gillette is secretary.

THE Muncie Academy of Medicine held its regular meeting February 5th at the Hotel Roberts. Dr. U. J. Wile, of Ann Arbor, Michigan, presented a paper on "The Fundamental Principles Underlying the Treatment of Syphilis."

THE California Medical Association is the sixth state to order *Hygeia* sent to each of the senators and assemblymen in the state legislature for the coming year. The other five are Arkansas, Minnesota, South Dakota, Texas and Wisconsin.

THE Northeastern Indiana Academy of Medicine held a meeting at the Gawthrop Hotel, Kendallville, February 28th. Dr. George J. Garceau,

of the James Whitcomb Riley Hospital, presented a paper on "Acquired Deformities of the Feet."

THE U. S. Civil Service Commission announces open competitive examination for social worker (psychiatric) and junior social worker. Applications will be rated as received by the Civil Service Commission at Washington, D. C., until June 29th.

THE Mu chapter of Phi Chi fraternity held its annual Founders' Day banquet at the Lincoln Hotel, Indianapolis, February 23rd. Speakers were Dr. W. A. Barnett, Lafayette; Dr. William A. Doeppers, Indianapolis; Dr. L. A. Ensminger, Indianapolis.

DR. B. R. KIRKLIN, formerly of Muncie but now of the Mayo Clinic, presented a paper before the Muncie Academy of Medicine at the dinner meeting held February 12th at the Hotel Roberts. His talk concerned the use of the x-ray in diagnosis of stomach disorders.

DR. STEPHEN A. DOUGLASS, of Hempstead, New York, has been appointed superintendent of the Marion County Tuberculosis Hospital at Sunnyside, to succeed Dr. Harold S. Hatch, who resigned January 1st. Dr. Douglass assumed his duties at the Sunnyside March 8th.

THE third of a series of clinics sponsored by the Indiana University School of Medicine and the James Whitcomb Riley Memorial Hospital was held February 12th in Indianapolis, with Dr. Willis Campbell, professor of orthopedic surgery at the University of Tennessee, conducting the clinic.

THE Wayne-Union County Medical Society held a meeting at Liberty, Indiana, and elected officers for 1929 as follows: Dr. W. A. Thompson, Liberty, president; Dr. Paul S. Johnson, Richmond, secretary-treasurer. Dr. Thurman B. Rice, of Indianapolis, presented a paper at this meeting.

THE Indianapolis Medical Society held its regular weekly meeting at the Athenæum, February 19th. Case reports were presented by Drs. A. M. Hetherington, C. D. Humes, Alfred Henry, Russell Hippensteel, John F. Kelly, A. S. Jaeger and G. B. Jackson. At the February 26th meeting, Dr. James F. Cooper, medical director of the American Birth Control League, New York City, presented an address on "Contraceptive Methods."

THE U. S. Civil Service Commission announces open competitive examinations for positions of occupational therapy aide (trades and industries).

(gardening) and horticulture and floriculture, and occupational therapy pupil aide for arts and crafts and trades and industries. Applications will be rated as received until June 29, 1929. Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C.

THE U. S. Civil Service Commission announces open competitive examination for physiotherapy assistant, applications for which position must be on file with the Commission at Washington, D. C., not later than May 7, 1929. The U. S. Civil Service Commission also announces open competitive examination for physiotherapy aide, applications for which must be on file not later than March 26th and May 7, 1929. Complete information and application blanks may be secured by writing to the U. S. Civil Service Commission, Washington, D. C.

THE American College of Physicians will hold its thirteenth annual clinical session in Boston, April 8 to 12. The program provides hospital visits, clinics, demonstrations and ward-walks during the forenoons at fifteen different Boston hospitals, and for general scientific sessions each afternoon and evening in the Assembly Room of the Hotel Statler, which hotel will be headquarters. Programs and details concerning reduced fares, admission, etc., may be secured from the executive secretary, E. R. Loveland, 133 South 36th Street, Philadelphia, Pa.

THE U. S. Civil Service Commission announces open competitive examination for physician and associate physician, applications for which positions must be on file at Washington, D. C., not later than June 29th. Examinations are to fill vacancies in hospitals of the Veterans' Bureau for duty throughout the United States. Entrance salaries are \$3,800 per year for physician and \$3,200 per year for associate physician. Higher-salaried positions are filled through promotion. Full information may be obtained from the U. S. Civil Service Commission at Washington, D. C.

THE First International Congress on Mental Hygiene will be held in Washington, D. C., May 5 to 10, 1930. The congress is being sponsored by a representative committee of mental hygiene experts, psychiatrists, educators and distinguished citizens from Africa, Australia, Belgium, Brazil, Bulgaria, Canada, Denmark, Finland, France, Germany, Great Britain, Greece, Holland, Hungary, Italy, Japan, Luxemburg, New Zealand, Norway, Porto Rico, Russia, Spain, Sweden and Switzerland. The chairman of the Committee on Organization of the congress is Dr. Arthur H. Ruggles, of Providence, Rhode Island, president of the American Foundation for Mental Hygiene.

EXAMINATIONS of candidates for commission as assistant surgeon in the regular corps of the U. S. Public Health Service will be held at Washington, D. C., Chicago, Illinois, New Orleans, Louisiana, San Francisco, California, and New York, New York, on April 29, 1929. Candidates must be twenty-three years of age and not over thirty-two years of age. They must have been graduated in medicine at a reputable medical college, and have had one year's hospital experience or two years' professional practice. Request for information or permission to take this examination should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C.

By joint resolution of Congress, May 1 is National Health Day. Each year some child health factor is emphasized, and this year May Day is Play Day. The Child Hygiene Division of the State Board of Health says that there should be no community too small, no home too poor to plan some observance of Child Health Day. To stimulate state-wide activity in child health improvement, the Indiana Child Hygiene Division is devoting six weeks to the initiation of health projects which will culminate on May Day. Every county in the state will be visited, and officials and leaders will be interviewed concerning the type of health project best adapted to each community or group. Where projects already have been started, the use of Child Health Day as a goal for excellence and the completion of some phase of the work will be suggested. Assistance will be given by the Child Hygiene Division staff when needed.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Ciba Company, Inc.:

Lipoiodine-Ciba, Diagnostic.

Ampules Lipoiodine-Ciba, Diagnostic, 5 cc.

H. K. Mulford Co.:

Acidophilus Bacillus Liquid—Mulford.

E. R. Squibb & Sons:

Dandelion Pollen Allergen Solution-Squibb; English Plantain Pollen Allergen Solution-Squibb; Goldenrod Pollen Allergen Solution-Squibb; Perennial Rye Grass Pollen Allergen Solution-Squibb; Ragweed (Dwarf) Pollen Allergen Solution-Squibb; Ragweed (Giant) Pollen Allergen Solution-Squibb; Red Top Pollen Allergen Solution-Squibb; Russian Thistle Pollen Allergen Solution-Squibb; Sunflower Pollen Allergen Solution-Squibb; Bermuda Grass Pollen Allergen Solution-Squibb, 5 cc.; June Grass Pollen Allergen Solution-Squibb, 5 cc.; Mugwort Pollen Allergen Solution-Squibb, 5 cc.; Orchard Grass Pollen Al-

lergen Solution-Squibb, 5 cc.; Sagebrush Pollen Allergen Solution-Squibb, 5 cc.; Western Ragweed Pollen Allergen Solution-Squibb, 5 cc.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

January 25, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; Chas. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held January 18th read, corrected and approved.

The release for Saturday, February 2nd, on "Sinus Trouble" read but remained unapproved by the Bureau. A member of the Bureau was to rewrite this release and present it to the committee for approval at the next meeting.

The committee discussed further the program for the five-year survey that has been started by the Committee on the Cost of Medical Care. The committee hopes to have a final report upon this suggested program ready within a short time.

Letter received from secretary of the State Board of Health regarding Thermo-Electro-Magnetism pamphlets that are being distributed in Indianapolis. The Publicity Bureau suggested that this matter be referred to the Better Business Bureau.

The following bill was approved for payment:

A. B. Dick Company.....\$6.85

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole February 1, 1929.

WILLIAM N. WISHARD, M.D.,

Chairman.

THOMAS A. HENDRICKS,
Secretary.

February 1, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. A. MacDonald, M.D., Chas. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held January 25th read and approved.

The release, "Our Debt to Animals," was approved for publication Saturday, February 9th.

The release upon "Sinus Trouble" reviewed by a member of the Bureau and final draft of release was to be prepared for presentation before the committee at the next meeting.

The committee discussed further the program for the five-year survey that is being conducted by the Committee on the Cost of Medical Care.

Newspaper "advertisement" which appeared in *The Portland Telegram* Friday, January 11, 1929, reviewed by the Bureau. The "advertisement" in question carried the photographs, names and laudatory comment upon two widely known physicians. The secretary was instructed to forward the paper containing this advertisement to the American Medical Association.

Article by health officer of South Bend upon work done on undulant fever received by the Bureau. The committee expressed high opinion upon the article but believes that such a detailed study should be sent to some medical journal rather than cut down for an article in the lay press. The secretary was instructed to write to the author saying that the Bureau would recommend this article for publication in *THE JOURNAL* of the Indiana State Medical Association or any other medical

journal he might desire. The article was accompanied by a summary which was to be returned to the author asking that it be further summarized for an article in the press.

A reprint from *The Pennsylvania Medical Journal* entitled "Unethical Advertisements in County Medical Society Bulletins" received by the Bureau. The following letter from the editor of the journal accompanied this article:

"There has been considerable criticism of certain county society bulletins in our state which carry advertisements that our State Society Journal would not accept. In an endeavor to line this up, the inclosed editorial has been written.

"Thinking that you may find it of interest because of similar situations in your own state, we are sending you this copy and should appreciate hearing from you in regard to your reaction to it."

The secretary was instructed to send both the letter and the article to the editor of the state *JOURNAL*.

Letter received bearing the heading of Columbia University offering a series of forty articles upon ventilation for newspaper use to the Bureau of Publicity for \$25.00 for the series. The Bureau did not accept the offer.

Clippings from the public press were reviewed by the committee.

The following report upon medical meeting received: Jan. 22 — Muncie, Indiana. Delaware-Blackford County Medical Society. "The Social Status of Medical Practice."

The following bill was approved for payment:

The Bailey Office Supply\$15.00

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole February 7, 1929.

WILLIAM N. WISHARD, M.D.,

Chairman.

THOMAS A. HENDRICKS,

Secretary.

MONROE COUNTY MEDICAL SOCIETY

The Monroe County Medical Society at its last meeting held at Bloomington, elected the following officers for 1929: President, Dr. Ray Borland; vice-president, Dr. Melville Ross; secretary-treasurer, Dr. F. H. Austin.

During the past year the society has held monthly meetings at the City Hospital and the following doctors from Indianapolis have been on the programs: Dr. Robert Moore, Dr. E. Roger Smith, Dr. E. Vernon Hahn, Dr. C. O. McCormick, Dr. Lester Smith, Dr. M. Winters, Dr. Ernest Rupel, Dr. W. D. Gatch and Dr. Gordon Batman.

These men from Indianapolis, covering a large field in medicine and surgery, have contributed much to the Monroe County Medical Society and to them we owe much for our work in 1928.

F. H. AUSTIN, M.D., Secretary.

THE LAKE COUNTY MEDICAL SOCIETY

The Lake County Medical Society met in regular session at the Gary Methodist Hospital, Thursday, February 14th, with an attendance of more than one hundred.

Applications for membership were received from Drs. W. A. Hornady, of Hammond, and G. L. Karras, of Gary.

Ballot on applications of Drs. Sophie Solf and Joseph Daimondstein; both declared elected to membership.

W. P. Gleason, of the Lake County Tuberculosis Association and of the Lake County Tuberculosis Sanitarium, having expressed a wish for a closer contact of these organizations and the medical society, on recommendation of the Council, the society asked the president to appoint a committee to meet with Mr. Gleason and discuss some plan whereby this might be brought about.

Dr. Shanklin, chairman of the legislative committee.

reported on matters now pending before the Indiana legislature. The committee was officially empowered to take all necessary steps to further the interests of the profession in legislative matters.

Future meetings announced as follows: March, St. Margaret's Hospital, Hammond, the program to be furnished by the staff thereof; April, Mercy Hospital, Gary, this meeting to be devoted to medical economics; May, St. Catherine's Hospital, East Chicago, program by local staff.

Dr. Geo. F. Bicknell, East Chicago, gave a very interesting resume of his experiences on a recent visit to the Vienna clinics.

Dr. C. B. Huggins, of the department of surgery, Rush Medical College, gave an exhaustive study of urinary incontinence. On motion, this paper was referred to the Indiana JOURNAL for publication.

Dr. Donald P. Abbott, Chicago, talked on various phases of diseases of the colon. This talk was very generously illustrated and proved unusually interesting and instructive.

In passing, it may be well to mention that, due to our very large membership, it has been found advisable to adopt the Council system of handling the business of the society. The Council meets at regular intervals and all matters pertaining to the society are discussed and recommendations made to the parent body, thus saving much time in our meetings.

E. M. SHANKLIN, Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society met in the Public Library January 29, 1929, with President Huffman in the chair.

Mr. Thornton, in charge of the First Aid of the Indiana and Michigan Electric Company, gave a short, concise talk on the training the men of his company receive in first aid. Two of his men demonstrated artificial respiration in the prone chest position. He stated that artificial respiration in all cases was kept up until the patient either revived or *rigor mortis* set in.

Dr. Douglas Owen reported a case of tuberculosis of the chest, giving history and x-ray finding of the chest.

Dr. J. L. Wilson gave the paper of the evening on "Surgery in the Diabetic," stressing the care such patient should receive before and after operation, the selection of the proper operation for each case, and the types of operation most successful.

The monthly dinner meeting of the St. Joseph County Medical Society was held in the Oliver Hotel, February 6, 1929, at 6:30 p. m. About eighty members and guests were present, the members of the St. Joseph County Bar Association being invited.

Edward J. Fogarty, superintendent of the Cook county jail, spoke on "Criminal Tendencies of Today."

Mr. Fogarty, formerly mayor of South Bend, afterwards warden of the Indiana State Penitentiary at Michigan City, and now superintendent of the Cook county jail, gave a most interesting talk on the criminal tendencies as he sees them in his dealing with sixty or seventy prisoners each day, every one of whom he personally examines as to health, habits, and mentality.

He spoke of the youthfulness and nationality of the present-day criminal, the miscarriage of justice due in part to the presence on every jury of some crook and of reforms necessary.

He outlined briefly the plans for a new criminal court and jail to be built in Chicago of most modern construction, which will include twelve courts, clinics, accommodations for the jury, opportunities for the segregation of men, women, white, black, and different diseases. He referred to the number of mental defectives among the criminals and the large percentage of them suffering from venereal disease.

It was Mr. Fogarty's opinion that only by proper

quarantine measures could the venereal disease menace be combated successfully.

In closing Mr. Fogarty complimented the state of Indiana on its state penitentiary at Michigan City, and on its excellent parole and probation systems.

Discussion was by Judge Miller of the juvenile court, Dr. Sensenich, Judge Slick of U. S. Federal Court, Dr. Stoltz, Judge Pattee, Dr. Hill, and Mr. Fogarty.

February 12, 1929. The St. Joseph County Medical Society met in the Public Library of South Bend at 8:30.

Dr. L. F. Fisher reported a case of diverticulum of the stomach with x-ray plates. He reviewed the few cases found in the literature and the probable causes of such condition.

The paper of the evening, "A Review of Radiant Energy," was given by Dr. M. D. Wygant. He discussed the physical properties of the different rays, pointing out their effects, useful and harmful, and their application in medicine to selected cases.

The paper was discussed by Doctors Ellison, Bolling, Lyon, Hyde, Fisher, Huffman, and Wygant.

The St. Joseph County Medical Society was invited to attend the dinner meeting of the St. Joseph Valley Chemical Society at Notre Dame University, February 20, 1929, when Dr. E. C. Kendall, of the Mayo Clinic, will speak on "Recent Studies in Thyroid."

MARTHA BREWER LYON, M.D.

Assistant Secretary and Treasurer.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Any information concerning these books will be supplied on request.

Books received since February 1, 1929:

RACIAL HYGIENE. By Thurman B. Rice, A.M., M.D., Associate Professor of Bacteriology and Public Health, Indiana University School of Medicine; 376 pages. Cloth. Price \$4.50. The Macmillan Company, New York, 1929.

COMPEND OF DISEASES OF THE SKIN. By Jay Frank Schamberg, A.B., M.D., Professor of Dermatology and Syphilology, Graduate School of Medicine, University of Pennsylvania. Eighth edition, revised and enlarged; 324 pages, illustrated. Cloth. Price \$2.50. P. Blakiston's Son & Company, Philadelphia, 1928.

CERTIFIED MILK. Proceedings of certified milk conferences held in 1928. Including conference of American Association of Medical Milk Commissions, Inc., and Certified Milk Producers' Association of America, Inc., Metropolitan Certified Milk Producers and Certified Milk Producers' Association of America, Inc.

TEXTBOOK OF CLINICAL NEUROLOGY. For students and practitioners. By M. Neustaeter, M.D., Ph.D., visiting neurologist, Central Neurological Hospital, Welfare Island, etc. Introduction by Edward D. Fisher, M.D.; 594 pages, with 228 illustrations, some in colors. F. A. Davis Company, Philadelphia, 1929.

ANGINA PECTORIS. By Harlow Brooks, M.D., Emeritus Professor of Clinical Medicine, New York University; 164 pages. One of Harper's Medical Monographs. Flexible binding. Price \$2.50. Harper & Brothers, New York and London, 1929.

SYPHILIS, ACQUIRED AND HEREDOSYPHILIS. By Chas. C. Dennie, B.S., M.D., Assistant Professor of Dermatology and Syphilology, University of Kansas School of Medicine. One of Harper's Medical Monographs; 304 pages. Flexible binding. Price \$2.50. Harper & Brothers, Publishers. New York and London, 1928.

PEDIATRICS FOR THE GENERAL PRACTITIONER. By Harry Monroe McClanahan, A.M., M.D., Professor of Pediatrics Emeritus, University of Nebraska; 606 pages, with 230 illustrations. Cloth. Price \$6.00. J. B. Lippincott Company, Philadelphia and London.

REVIEWS:

STEDMAN'S MEDICAL DICTIONARY. By Thomas Lathrop Stedman, A.M., M.D., editor of the *Twentieth Century Practice of Medicine*, etc. Tenth revised edition. Illustrated. 1194 pages. Flexible binding. William Wood & Company publishers, New York, 1928. Price \$7.50.

A good medical dictionary is necessary as one of the possessions of every progressive physician. In fact we do not see how any physician can get along without a medical dictionary. In making a selection it is well to procure one that is practical in every sense, of limited size so that it can be handled easily, comprehensive without containing too much superfluous information, and possessing the latest mechanical features. Such a dictionary is that edited by Dr. Stedman, now in its tenth, revised edition. The author has made a very painstaking effort to present a dependable work, and it gives correct spelling, trustworthy definitions, and the information that seems preferable in a correct interpretation, spelling or pronunciation of the words. This last tenth edition has been revised extensively and nearly five hundred new medical terms added and many old and obsolete ones omitted. As in previous editions the binding is flexible, the paper is thin but of excellent quality, and the typographical work is above criticism.

ACUTE AND INFECTIOUS DISEASES. By Jay Frank Schamberg, M.D., Professor of Dermatology and Syphilology in the Graduate School of Medicine, University of Pennsylvania; and John A. Kolmer, M.Sc., M.D., Dr.P.H., D.Sc., LL.D., Professor of Pathology and Bacteriology in the University of Pennsylvania, etc. Second edition, thoroughly revised. Illustrated with 161 engravings and twenty-seven full page plates. 888 pages. Cloth. Price \$10.00. Lea & Febiger, Philadelphia, 1928.

This work is practically a classic. It is the last word in authoritative information concerning infectious diseases. This second edition represents an extensive revision in order to not only bring the book thoroughly up to date but make it more acceptable and comprehensive in every particular. Much additional information is given concerning the newer treatment for diphtheria, scarlet fever, Vincent's angina, and some of the milder acute infectious diseases. The clinical phases of the acute infectious diseases receive special consideration. We have no hesitation in giving this work unqualified endorsement, as we feel that it ought to be in the library of every practicing physician.

TEXTBOOK OF PATHOLOGY. By William G. MacCallum, M.D., Professor of Pathology and Bacteriology Johns Hopkins University. Fourth edition, thoroughly revised. Octavo volume of 1177 pages with 606 original illustrations. Philadelphia and London: W. B. Saunders Company, 1928. Cloth. Price \$10.00.

We have had occasion to comment favorably upon previous editions of this excellent work. We can add little to the recommendation given except to add that this fourth edition represents a complete revision in order to present the extraordinary advances that have occurred in every field of medical practice and in which pathology shares. The author has carried out the intent expressed in the first edition, to discuss the general principles of pathology as illustrated by the commoner and more important diseases, with special reference to the basis of etiology. In this last edition especial emphasis has been placed upon conclusions drawn from a wide autopsy experience, and perhaps changes an attitude in consequence of the findings. All in all the book is a practical book on pathology for the physician in active practice as well as the student.

THROMBO-ANGIITIS OBLITERANS. By George E. Brown, M.D., and Edgar V. Allen, M.D., Division of Medi-

cine, Mayo Clinic, collaborating in Pathology with Howard R. Mahorner, M.D., Fellow in Surgery, the Mayo Foundation. Twelve mo. of 219 pages with sixty-two illustrations. Cloth. Price \$3.00. W. B. Saunders Company, Philadelphia and London, 1928.

Essentially this is a discussion of the subject of gangrene under its technical name of thrombo-angiitis obliterans. However, while the condition is associated with severe degrees of gangrene, yet the authors are able to show that there is such a condition as thrombo-angiitis obliterans before the appearance of atrophic disturbances in gangrene. Therefore, the introduction of appropriate treatment, following the recognition of the character of the disease, has prevented many amputations and afforded a more optimistic prognosis. The study is based on the observation of more than 300 cases in the Mayo Clinic, during a period of five years, and the authors have arrived at conclusions that seem trustworthy and helpful to physicians in general. It is a very useful and comprehensive study.

THE INFANT AND YOUNG CHILD. By John Lovett Morse, M.D., Edwin T. Wyman, M.D., and Lewis Webb Hill, M.D., of Harvard Medical School and Children's Hospital, Boston, Massachusetts. Second edition, revised. 299 pages, illustrated. Cloth. Price \$2.00. W. B. Saunders Company, Philadelphia and London, 1929.

We can do no better than quote the publishers, who say that this book has been written by three Harvard teachers who specialize in the care of children, and tell mothers what modern medicine and modern health care can do to keep children healthy. In simple language the authors solve the problems and dispel the worries of mothers. The complete care of the child is directed during the periods from birth to six years. The diseases of infancy and childhood are discussed in such a manner that mothers will know whether the child is ill or not, and if ill, what to do until the doctor arrives. There is modern advice and instruction on clothing, breast feeding, weaning, milk modifications, artificial foods, indigestion, recipes, sleep, exercise, training, emergencies, etc. This second edition represents a revision in order to bring it fully up to date, and discuss some of the newer subjects like the use of ultra-violet light, modifications in feeding, etc. We have no hesitation in recommending the book as filling its intended place, and it should have a very wide sale among mothers, and physicians in general will not go amiss if they recommend the book.

CLINICAL INTERPRETATION OF THE WASSERMANN REACTION. By Robert A. Kilduffe, A.B., A.M., M.D., Director Laboratories, Atlantic City Hospital, etc. Two hundred pages, illustrated. Cloth. Price \$2.50. Lea & Febiger, Philadelphia and New York, 1926.

Briefly stated this book is intended not only to describe the technique in carrying out the Wassermann test but gives very definite information that will aid the serologist in interpreting properly the findings when making the test. There can be no question about the increasing frequency with which the Wassermann test is applied, but unfortunately the test is not always wisely interpreted. Dr. Kilduffe's book should aid in making the Wassermann test more instructive and indicative.

OPHTHALMIC OPTICS. By Alfred Cowan, M.D., Assistant Professor in Ophthalmology, Graduate School of Medicine, University of Pennsylvania. Second edition; 262 pages, with 121 illustrations, many in colors. Cloth. Price \$3.50. F. A. Davis Company, Philadelphia, 1928.

This book deals with the general principles of light, reflection and refraction, or the mathematics of ophthalmic optics. The matter is presented in a scientific, correct and thorough manner and in understandable language. It will prove especially interesting in furnishing a working knowledge of ophthalmic optics to students

and practitioners. The experiments or examples cited prove valuable in elucidating the text, and making the subject more understandable. If we would offer any criticism it would be concerning the scant consideration given ophthalmoscopy and retinoscopy. The latter subject is confined to less than four pages, and if it has any place in the book it should have received more comprehensive attention.

PROBLEMS IN SURGERY. University of Washington Graduate Medical Lectures for 1927. By George W. Crile, M.D., edited by Amy F. Rowland. Octavo volume of 171 pages, illustrated. W. B. Saunders Company, Philadelphia and London, 1928. Cloth. Price \$4.00.

This book represents a series of lectures on various subjects which would seem to the distinguished author to be of prime importance in present day surgery. Some of the subjects discussed are as follows: The management of acute infection; the general consideration of the treatment of premalignant and malignant conditions; operations on the bad risk patient; the mechanism of hyperthyroidism; diagnostic and operative clinics; and the bipolar interpretation of certain normal and pathological conditions. Dr. Crile, whose unusual ability and wide experience is recognized, has discussed these subjects in a manner that justifies consideration at the hand of every man who attempts to do surgery.

SERUM DIAGNOSIS BY COMPLEMENT FIXATION. By John A. Kolmer, M.A., M.D., Dr.P.H., D.Sc., LL.D., Professor of Pathology and Bacteriology in the Graduate School of Medicine of the University of Pennsylvania and Member of the Research Institute of Cutaneous Medicine; 584 pages, illustrated with sixty-five engravings. Cloth. Price \$7.00. Lea & Febiger, Philadelphia, 1928.

So far as we know, this is the most comprehensive and trustworthy discussion of the subject of serum diagnosis by complement fixation that ever has been published. In addition to a description of the Wassermann reaction, the author gives an account of original investigations and the description of new methods along with practical application in connection with the use of the test. Part I has to do with the underlying principles of serum hemolysis and complement fixation, since a good working knowledge of them is essential for the proper conduct of the tests and a proper interpretation of reactions. Part II is devoted to the subject of the principles of technique, so important in the conduct of tests aiming to possess the maximum of sensitiveness consistent with specificity. The author very justly calls attention to the harm that has been done by improperly qualified workers as well as by defective methods and improper interpretations. Part III is devoted to a detailed description of the directions that should be employed in order to secure satisfactory results. The Kolmer method has been so greatly modified in some laboratories that it scarcely bears resemblance to the Kolmer technique. He makes a very just plea for the accurate following of methods such as conducted in his laboratory if proper results are to be secured. This book should be in the hands of everyone who attempts to make serum diagnosis by complement fixation.

PREVENTIVE MEDICINE. By Mark F. Boyd, M.D., C.P.H., Member of Regular Field Staff, International Health Division of Rockefeller Foundation; formerly Professor of Bacteriology and Preventive Medicine in the Medical Department of the University of Texas. Third edition, revised. Octavo volume of 475 pages, with 151 illustrations. Cloth. Price \$4.50. W. B. Saunders Company, Philadelphia and London, 1928.

It no doubt is true, as intimated by the author of this excellent book, that the medical profession should play a more important role in the field of preventive medicine and public health, but up to the present time it has

permitted interest to lag and the work to be taken over by others, with perhaps a growing sentiment in the minds of the lay public that preventive medicine and public health is of no particular interest to the individual physician. The author hopes to bring home to medical students and practitioners a realization of their public health responsibilities and to stimulate cooperation with public health authorities in their work. The book is excellently written and presents the salient features of modern preventive medicine. In fact, the author says that the book represents a minimum knowledge of the subject which the student of medicine or the practitioner of medicine should be expected to possess. This third edition is a very careful revision of all previous editions. The principal sections are as follows: Diseases Due to Invading Microorganisms; Deficiency Diseases; Occupational Diseases; The Puerperal State; Heredity and Disease; Special Aspects of Hygiene and Sanitation; and Demography and Public Health. Very naturally, much attention is given to the cause, the method of dissemination, and methods of controlling the spread of communicable and other diseases. Hygiene and sanitation come in for a certain amount of discussion. The subject matter has been presented excellently and is an authority that can be expected from a representative of the Rockefeller Foundation and formerly a teacher of bacteriology and preventive medicine.

TREATMENT OF DIABETES MELLITUS. By Elliott P. Joslin, M.D., M.A., Clinical Professor of Medicine, Harvard Medical School; Consulting Physician, Boston City Hospital; Physician to New England Deaconess Hospital. Fourth edition, enlarged, revised and rewritten; 998 pages, illustrated. Cloth. Price \$9.00. Lea & Febiger, Philadelphia, 1928.

This is the fourth edition of what many have conceded to be a classic treatise on diabetes mellitus. It represents the last word on the subject. The author discusses every phase of the subject, including etiology, pathology, clinical course, prognosis, and treatment of the disease. The problem of treatment has been given especial consideration, with due attention to all of the modern methods as brought about through the discovery and use of insulin and other remedies. Any physician who has a diabetic patient under his care will be wise if he follows the directions given in this very comprehensive and trustworthy work, and he can expect better results if he follows the suggestions given. It is the best thing of its kind published in the English language.

ADDRESSES ON SURGICAL SUBJECTS. By Sir Berkeley Moynihan, Bart., President of the Royal College of Surgeons of England; 348 pages, illustrated. Cloth. Price \$6.00. W. B. Saunders Company, Philadelphia and London, 1928.

This book is composed of addresses delivered by a celebrated English surgeon before different audiences and on different occasions, and for the most part they have been printed in some of the leading surgical journals of the world. However, they have more than passing interest for physicians, as they represent research and many of the finer points of the art and science of surgery expounded by a master craftsman. Aside from expressing the author's views, the essays also pay tribute to the constructive work of some of the great physicians and surgeons of the past.

TEXTBOOK OF PHARMACOLOGY AND THERAPEUTICS. By Hugh A. McGuigan, M.D., Professor of Pharmacology and Therapeutics, University of Illinois School of Medicine, Chicago. Octavo volume of 660 pages, illustrated. Cloth. Price \$6.00. W. B. Saunders Company, Philadelphia and London, 1928.

This is a new book the author of which says his aim is to present purely the important facts of pharmacology and to give the basis for the facts. His theory is that

an analysis of the action of drugs aids in the development of a solid foundation for therapeutic application. He has made an attempt to connect physiology, biochemistry and pharmacology with clinical application. Due attention has been given to the newer drugs and their clinical application and therapeutic value. To us the new feature of this book is the attention given to contraindications for the administration of certain pharmaceuticals and chemicals.

RACIAL HYGIENE. By Thurman B. Rice, A.M., M.D., Associate Professor of Bacteriology and Public Health, Indiana University School of Medicine; Extension Lecturer in Eugenics, Indiana University; 376 pages. Cloth. Price \$4.50. The Macmillan Company, New York, 1929.

We congratulate this home state writer upon having turned out a book that can be read with profit by laymen as well as scientists. It is a discussion of eugenics and race culture in a manner that is interesting as well as instructive, and it ought to prove very useful in bettering the conditions under which we live and the manner in which our race is improved through inheritance, provided due attention is given to the facts so ably presented. The author presents the subject and deductions in a very forceful and interesting way with every indication that he thoroughly understands his subject and is capable of presenting analyses that are worthy of serious attention. Particular attention is given to the subject of inheritance as affecting the human race, and in this connection he discusses inherited diseases and defects, inbreeding, consanguineous marriages, heredity plus environment, and the racial poisons. There also are interesting chapters on the economic problems affecting the race; existing customs and laws of courtship, marriage and divorce; the improvement of the differential birth rate; factors in marriage selection; the effect of our modern education; and, last but not least, the subject of the presence of the defective individual as a social menace and the need for preventing him from reproducing his kind. We hope that for the benefit of mankind the book will be read widely and the conclusions given serious attention.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

NITRATES IN SEASICKNESS.—Sodium nitrite and glycerol trinitrate (nitroglycerine, which has the physiologic action of nitrates) have been used in seasickness but they have not been proved to be specific. From 3 to 5 grains (0.2 to 0.3 Gm.) of sodium nitrite are given at two-hourly intervals for several doses and may be used as a preventive or a curative. (*Journal of the A. M. A.*, Dec. 1, 1928, p. 1738.)

THE POTENTOR FRAUD.—In the latter part of 1925, physicians were receiving from one Julius Saur, who called himself an "importer" and did business from 17 West Forty-second Street, New York City, a form-letter and a circular dealing with a device known as the "Potentor". The Potentor was a small hollow rubber ring with an air valve attached to it. It was sold as a device that would produce sexual rejuvenation in the male. The Postmaster-General issued a fraud order on March 20, 1928, closing the mails to Julius Saur. (*Journal of A. M. A.*, December 8, 1928, p. 1823.)

MME. PERRY, DERMATOLOGIST.—From Lynn, Massachusetts, Mrs. Sadie L. Perry, sixty years old, carries on a fraudulent business under various trade names—"Mme. Perry, Dermatologist", "Mme. Perry, Miracle Woman of the World", etc. Mrs. Perry was engaged in selling, through the United States mails, a recipe of a medicinal preparation, and also the preparation itself, under the claim that, when used, the product would grow hair on bald heads, stop falling hair, cure dandruff, restore gray and faded hair to its former color and make the eyebrows grow! A fraud order has been issued which denies

the use of the mails to Mme. Perry (*Journal of A. M. A.*, December 15, 1928, p. 1912.)

PASCARNATA-MERRELL.—According to the catalogue of the Wm. S. Merrell Co., Pascarnata is prepared from fresh *Passiflora incarnata* (passion flower) and represents the medicinal virtues of the whole plant, but no statement of the amount of passion flower contained in a given quantity of this proprietary is given. Pascarnata has not been accepted for New and Nonofficial Remedies nor is any passion flower preparation included in the book. The following are some of the claims advanced for Pascarnata: "It serves as an ideal soporific (soporific?), without narcotic action, and is one of the most desirable antispasmodic and antineuralgics available." "In nervous or sick headache, sleeplessness, of typhoid and other fevers, cerebral excitement, overworked mental faculties, brain-fag and the over-stimulation due to worry and hysteria, Pascarnata will be found highly effective." "It is useful as a palliative in spasmodic bronchial asthma and whooping cough, and also in the hysteria due to dysmenorrhea." The following is the estimate of passion flower that is contained in the epitome of the U. S. Pharmacopeia and National Formulary issued by the Council on Pharmacy and Chemistry: "Exploited by manufacturers of proprietary medicines for the treatment of insomnia, but probably inert." At one time passion flower was a constituent of many so-called female remedies and uterine tonics, but the drug was found to be without effect on the excised guinea-pig uterus. (*Journal of A. M. A.*, December 15, 1928, p. 1914.)

CHEMICAL EXAMINATION OF SALYGRAN.—G. W. Collins reports work carried out in the A. M. A. Chemical Laboratory for the Council on Pharmacy and Chemistry on Salygran. He reports that in various journals, periodicals and textbooks a structural formula is given for the compound which differs from that used by the distributor of the product. The theoretical percentage of mercury of neither formula agreed with that given by the manufacturer. The examination disclosed that the formula used in the German literature was incorrect and that that of the manufacturer is correct. The product was found to be a definite chemical compound and of good purity. On the basis of the examination, tests and standards were drawn up: These were agreed to by the manufacturer and are used in the New and Nonofficial Remedies description adopted by the Council on Pharmacy and Chemistry. (*Journal of A. M. A.*, December 22, 1928, p. 1994.)

HAIR-A-GAIN.—This is an alleged enhancer of beauty, sheen, luster, color, texture, contour and abundance of the scalp and hair. Georgia O. George of Los Angeles claims to be the inventor, originator and sole manufacturer of this preparation and of Mask O'Uth Liquid Mask and Scientific Systemethod. "Hair-a-Gain" is advertised in newspapers and by radio broadcasting stations WMCA, New York, WHK, Cleveland, WEBH, Chicago, KMOX, St. Louis, KFXF, Denver and various stations on the Pacific Coast. The A. M. A. Chemical Laboratory reports that Hair-A-Gain Liquid Shampoo is marketed in bottles containing about 240 cc. of yellow, turbid, viscous liquid, possessing a faint odor suggestive of tar and a marked insoluble residue. From its examination the laboratory concludes that the preparation is essentially a water solution of ordinary soap. Probably it is the tar, or tarlike substance, that is incorporated in the Hair-A-Gain Paste that has been responsible for such unpleasant effects as have been reported from its use. (*Journal A. M. A.*, December 22, 1928, p. 2012.)

BOULLION CUBES.—These do not contain a great deal of nourishment. A four-ounce (120 cc.) portion of liquid boullion contains approximately 2.5 Gm. of protein, and no fat or carbohydrate, and has a fuel value of 13 calories. The only relation of boullion cubes to food lies in their stimulating effect on the gastric juices. (*Journal A. M. A.*, December 22, 1928, p. 2015.)

ANATOXIN AND DIPHTHERIA TOXOID.—Anatoxin is diphtheria toxin so modified by the addition of formalde-

hyde and the application of heat that the toxic properties are greatly reduced while the antigenic properties are retained. The product is prepared and recommended for use in diphtheria prophylaxis by Ramon of the Pasteur Institute, Paris, France. American manufacturers supply a product, diphtheria toxoid, which is prepared by the addition of formaldehyde to diphtheria toxin and the application of heat. This material is tested for antigenic efficiency by a guinea-pig protection test. It is essentially the same as anatoxin except for the method of testing for potency. The diphtheria toxoid of the H. K. Mulford Co. and E. R. Squibb & Sons has been accepted for New and Nonofficial Remedies (*Journal of A. M. A.*, December 22, 1928, p. 2016.)

THE NATURE OF PEPSIN.—Most of the efforts to "purify" enzymes have resulted in the separation of products bearing the characteristics of proteins. This has been conspicuously true of the amylolytic group. It appears that the higher the degree of purification of the amylases, the more nearly do they approach the proteins in composition and properties. Not long ago it was shown that pepsin of high proteolytic power can be obtained by isoelectric precipitation. At PH 2.5, products showing a proteolytic potency of 1:65,000 were secured. The analyses of these products are characteristic of a protein. All fractions still possess proteolytic properties until they reach the stage when they are sufficiently small to diffuse through parchment or animal membranes. The gradual decrease of proteolytic activity of the enzyme itself is paralleled by loss of its complex protein characteristics. (*Journal of A. M. A.*, December 29, 1928, p. 2069.)

COD LIVER OIL.—The discovery of at least two specifically potent food factors, vitamins A and D, in cod liver oil within comparatively recent years has completely altered the attitude of scientific investigators, and laymen as well, toward this product that long had a place in dietotherapy on the basis of essentially empirically founded impressions. It is true that cod liver oil functions as a readily digested and utilized fat and thus as a source of energy; yet an ounce yields little more than two hundred fifty calories. So far as present knowledge is concerned, the vitamin content of cod liver oil constitutes its chief claim for consideration in treatment. (*Journal of A. M. A.*, December 29, 1928, p. 2080.)

NORMAL HORSE SERUM.—A normal horse serum (New and Nonofficial Remedies, 1928, p. 348) marketed in packages of one syringe containing 10 cc.; in packages of two syringes each containing 10 cc.; in packages of one vial containing 25 cc.; in packages of one double ended vial containing 50 cc.; also in packages of one double ended vial containing 100 cc.—(The National Drug Co., Philadelphia.)

DIPHTHERIA ANTITOXIN, EXTRA CONCENTRATED.—A diphtheria antitoxin, concentrated (New and Nonofficial Remedies, 1928, p. 352), prepared by inoculating horses with diphtheria toxin. It is marketed in single vial packages of 1,000 and 20,000 units; in syringes containing, respectively, 1,000, 3,000, 5,000, 10,000 and 20,000 units.—(The National Drug Co., Philadelphia.)

TETANUS ANTITOXIN.—A tetanus antitoxin, concentrated (New and Nonofficial Remedies, 1928, p. 356), prepared by inoculating horses with tetanus toxin. It is marketed in packages of one vial containing 1,500 units; in packages of one syringe containing 1,500 units; also in packages of one syringe containing 5,000 units.—(The National Drug Co., Philadelphia.)

ANTISTREPTOCOCCIC SERUM.—A polyvalent antistreptococcus serum (New and Nonofficial Remedies, 1928, p. 361) obtained by immunizing horses with streptococci from various clinical sources. It is marketed in packages of one syringe containing 20 cc. and in packages of one double ended vial containing 50 cc.—(The National Drug Co., Philadelphia.)

VACCINE VIRUS.—A vaccine virus (New and Nonofficial Remedies, 1928, p. 362) marketed in packages

containing, respectively, one, five and ten capillary tubes.—(The National Drug Co., Philadelphia.)

RABIES VACCINE-HUMAN (SEMPLÉ METHOD).—An antirabic vaccine (New and Nonofficial Remedies, 1928, p. 363) prepared according to the general method of David Semplé (phenol killed). Marketed in sets of two packages, the first containing four 2 cc. vials and the second containing ten 2 cc. vials.—(The National Drug Co., Philadelphia.)

PERTUSSIS VACCINE.—A pertussis bacillus (New and Nonofficial Remedies, 1928, p. 376) marketed in packages of one 5 cc. vial containing 4,000 million killed pertussis bacilli per cc.; in packages of one 15 cc. vial containing 4,000 million killed pertussis bacilli per cc.; in packages of one 30 cc. vial containing 4,000 million killed pertussis bacilli per cc.—(The National Drug Co., Philadelphia.)

PNEUMOCOCCUS VACCINE.—A pneumococcus vaccine (New and Nonofficial Remedies, 1928, p. 379) marketed in packages of one 5 cc. vial containing 5,000 million killed pneumococci per cc.; in packages of one 15 cc. vial containing 5,000 million killed pneumococci per cc.; in packages of one 30 cc. vial containing 5,000 million killed pneumococci per cc.—(The National Drug Co., Philadelphia.)

STAPHYLOCOCCUS VACCINE.—A staphylococcus vaccine (New and Nonofficial Remedies, 1928, p. 391) marketed in packages of one 5 cc. vial containing 2,000 million killed bacilli per cc.; in packages of one 15 cc. vial containing 2,000 million killed bacilli per cc.; in packages of one 30 cc. vial containing 2,000 million killed bacilli per cc.—(The National Drug Co., Philadelphia.)

TYPHOID VACCINE.—A typhoid vaccine (New and Nonofficial Remedies, 1928, p. 383) marketed in packages of one 5 cc. vial containing 1,500 million killed typhoid bacilli per cc.; in packages of one 15 cc. vial containing 1,500 million killed typhoid bacilli per cc.; in packages of one 30 cc. vial containing 1,500 million killed typhoid bacilli per cc.—(The National Drug Co., Philadelphia.)

TYPHOID-PARATYPHOID COMBINED VACCINE.—A typhoid vaccine (New and Nonofficial Remedies, 1928, p. 383) marketed in packages of three 1 cc. vials, the first dose containing 500 million killed typhoid bacilli, 375 million killed paratyphoid A bacilli and 375 million killed paratyphoid B bacilli, the second and third doses each containing 1,000 million killed typhoid bacilli, 750 million killed paratyphoid A bacilli and 750 million killed paratyphoid B bacilli; in packages of one 5 cc. vial containing 1,000 million killed typhoid bacilli, 750 million killed paratyphoid A bacilli and 750 million killed paratyphoid B bacilli per cc.; in packages of one 15 cc. vial containing 1,000 million killed typhoid bacilli, 750 million killed paratyphoid A bacilli and 750 million killed paratyphoid B bacilli per cc.; in packages of one 30 cc. vial containing 1,000 million killed typhoid bacilli, 750 million killed paratyphoid A bacilli and 750 million killed paratyphoid B bacilli per cc.; in packages of ninety 1 cc. vials (thirty immunizations), being thirty sets of three doses, the first dose containing 500 million killed typhoid bacilli and 375 million each of killed paratyphoid A and B bacilli, the second and third doses containing, respectively, twice the number of bacilli in the first dose.—(The National Drug Co., Philadelphia.)

TYPHOID-PARATYPHOID A VACCINE.—A typhoid vaccine (New and Nonofficial Remedies, 1928, p. 383) marketed in packages of one 5 cc. vial containing 750 million killed typhoid bacilli and 250 million killed paratyphoid A bacilli per cc.; in packages of one 15 cc. vial containing 750 million killed typhoid bacilli and 250 million killed paratyphoid A bacilli per cc.; in packages of one 30 cc. vial containing 750 million killed typhoid bacilli and 250 million killed paratyphoid A bacilli per cc.—(The National Drug Co., Philadelphia.)

SCARLET FEVER STREPTOCOCCUS TOXIN FOR PREVENTIVE IMMUNIZATION—P. D. & Co.—It is prepared by the method of Drs. Dick by license of the Scarlet Fever Committee, Inc. (New and Nonofficial Remedies, 1928, p. 392). Marketed in packages of five vials of toxin, containing, respectively, 500, 2,000, 8,000, 25,000 and 80,000 skin test doses; in packages of fifty vials of toxin, ten containing 500 skin test doses, ten containing 2,000 skin test doses, ten containing 8,000 skin test doses, ten containing 25,000 skin test doses, and ten containing 80,000 skin test doses. Parke, Davis & Co., Detroit.—(*Jour. A. M. A.*, January 5, 1929, p. 55).

BOTHROPS ANTITOXIN—An antitoxic serum prepared by immunizing animals against the venom of the tropical American serpents of the genus *Bothrops*. Evidence has accumulated to show that the venom of certain snakes may be neutralized by the employment of a serum obtained from animals that have been injected with venom from a snake of the same family. Bothrops antitoxin is used to neutralize the venom injected by the bite inflicted by members of the genus *Bothrops*. The serum is administered intramuscularly or subcutaneously; in cases seen late or in the presence of severe symptoms it may be administered intravenously.

ANTIVENIN (BOTHROPIC)—Tropical American Anti-Snake-Bite Serum.—An antitoxic serum prepared by injecting horses with venom from serpents of the genus *Bothrops*, especially of the "Fer-de-Lance" (*Bothrops atrox*). It is claimed to have neutralizing effect against the venom of the genus represented. The serum is marketed in syringes of 10 cc. (a single dose). H. K. Mulford Co., Philadelphia.

EPHEDRINE HYDROCHLORIDE—LILLY.—A brand of ephedrine hydrochloride—N. N. R. (New and Nonofficial Remedies, 1928, p. 175). It is also supplied in the form of Pulvules Ephedrine Hydrochloride—Lilly, $\frac{3}{8}$ grain, Pulvules Ephedrine Hydrochloride—Lilly, $\frac{3}{4}$ grain, and Solution Ephedrine Hydrochloride—Lilly, 3%. Eli Lilly & Co., Indianapolis.

TABLETS EPHEDRINE HYDROCHLORIDE—SQUIBB, $\frac{3}{8}$ GRAIN.—Each tablet contains ephedrine hydrochloride—Squibb (*The Journal*, September 1, 1928, p. 645) $\frac{3}{8}$ grain. E. R. Squibb & Sons, New York.

TABLETS EPHEDRINE HYDROCHLORIDE—SQUIBB, $\frac{3}{4}$ GRAIN.—Each tablet contains ephedrine hydrochloride—Squibb (*The Journal*, September 1, 1928, p. 645) $\frac{3}{4}$ grain. E. R. Squibb & Sons, New York.

MACDOWELL'S WHEAT-NUT-CASEIN DIETETIC FLOUR.—A flour prepared from wheat, edible nuts and casein, to which has been added a leavening mixture composed of potassium bitartrate and sodium bicarbonate and sodium chloride as flavoring. The product has approximately the following composition: protein, 28.67; carbohydrate, 28.68; fat, 18.69; ash, 5.64; fiber and pentosans, 7.59; and water, 8.49. MacDowell's wheat-nut-casein dietetic flour is proposed for use in the dietetic treatment of diabetes and wherever restriction of carbohydrate in the diet is desired. MacDowell Brothers, Ogdensburg, N. Y.

PIRQUET TEST FOR TUBERCULOSIS (BOVINE TYPE).—Tuberculin-Koch (New and Nonofficial Remedies, 1928, p. 368), marketed in capillary tubes, put up in packages, respectively, of one tube, two tubes and ten tubes, accompanied by controls. H. K. Mulford Co., Philadelphia.

TUBERCULIN OINTMENT (MORO OINTMENT) (BOVINE TYPE).—An ointment containing Tuberculin-Koch (New and Nonofficial Remedies, 1928, p. 368) fifty percent, with an equal part of hydrous wool fat. H. K. Mulford Co., Philadelphia.

TUBERCULIN INTRACUTANEOUS (BOVINE TYPE).—Marketed in single packages of one intradermal syringe containing Tuberculin-Koch (New and Nonofficial Remedies, 1928, p. 368), 0.2 mg. in physiological solution of sodium chloride, 0.05 cc.; in packages of five intradermal syringes each containing tuberculin-Koch (New

and Nonofficial Remedies, 1928, p. 368) 0.2 mg. in physiological solution of sodium chloride; and in single vial packages containing tuberculin-Koch (New and Nonofficial Remedies, 1928, p. 368) 0.012 gm. in physiological solution of sodium chloride, 3 cc. H. K. Mulford Co., Philadelphia.—(*Jour. A. M. A.*, January 19, 1929, p. 231).

CONCENTRATED LIVER EXTRACT-ARMOUR.—A solution of a water-soluble fraction extracted from fresh mammalian liver. One hundred cc. represents fresh liver, 767 Gm. (1 fluidounce represents eight ounces avoirdupois). Concentrated liver extract-Armour is used in the treatment of pernicious anemia. Its value in other types of anemia has not been established. Concentrated liver extract-Armour is administered orally. (Armour & Co., Chicago.)

AMPULES DEXTROSE, U. S. P., 10 GM., 20 CC.—Each ampule contains dextrose, U. S. P. (New and Nonofficial Remedies, 1928, p. 244) 10 Gm., in distilled water, 20 cc.; buffered with sodium glycerophosphate, 0.03 percent. Abbott Laboratories, North Chicago.

AMPULES DEXTROSE, U. S. P., 25 GM., 50 CC.—Each ampule contains dextrose, U. S. P. (New and Nonofficial Remedies, 1928, p. 244) 25 Gm., in distilled water, 50 cc.; buffered with sodium glycerophosphate, 0.03 percent. Abbott Laboratories, North Chicago.

POLLEN ALLERGEN SOLUTIONS—SQUIBB.—In addition to the products listed in New and Nonofficial Remedies, 1928, p. 31, the following products marketed in 5 cc. vials, have also been accepted: Dandelion Pollen Allergen Solution—Squibb; English Plantain Pollen Allergen Solution—Squibb; Goldenrod Pollen Allergen Solution—Squibb; Perennial Rye Grass Pollen Allergen Solution—Squibb; Ragweed (Dwarf) Pollen Allergen Solution—Squibb; Ragweed (Giant) Pollen Allergen Solution—Squibb; Red Top Pollen Allergen Solution—Squibb; Russian Thistle Pollen Allergen Solution—Squibb; Sunflower Pollen Allergen Solution—Squibb. E. R. Squibb & Sons, New York.

POLLEN ALLERGEN SOLUTIONS—SQUIBB.—Five cc. vial packages of the following products have also been accepted: Bermuda Grass Pollen Allergen Solution—Squibb; June Grass Pollen Allergen Solution—Squibb; Mugwort Pollen Allergen Solution—Squibb; Orchard Grass Pollen Allergen Solution—Squibb; Sagebrush Pollen Allergen Solution—Squibb; Western Ragweed Pollen Allergen Solution—Squibb. E. R. Squibb & Sons, New York.

TABLETS CINCHOPHEN—ABBOTT, 5 GRAINS.—Each tablet contains cinchophen (New and Nonofficial Remedies, 1928, p. 123) 5 grains. Abbott Laboratories, North Chicago.

SULPHARSYPHENAMINE—SQUIBB, 0.9 GM. AMPULES.—Each ampule contains sulpharsypnenamine—Squibb (New and Nonofficial Remedies, 1928, p. 84) 0.9 Gm. E. R. Squibb & Sons, New York.—(*Jour. A. M. A.*, January 26, 1929, p. 313).

PROPAGANDA FOR REFORM

NEISSER (GONOCOCCIC) VACCINE AND ERYSIPELAS VACCINE (NATIONAL DRUG CO.) NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that the National Drug Co., Philadelphia, markets Neisser (Gonococcic) Vaccine and Erysipelas Vaccine. In 1924 the Council omitted from New and Nonofficial Remedies all gonococcus vaccines and in 1925 it omitted all streptococcus vaccines because experience with such preparations had not established their value and because the Council's consultants concluded that they had no field of usefulness. In accordance with this action, the Council declared the preparations of the National Drug Co. inadmissible to New and Nonofficial Remedies.—(*Jour. A. M. A.*, January 5, 1929, p. 44).

TARTAROFF.—This is exploited as a "marvelous discovery" that "acts like magic on the teeth"; "Tartaroff is the greatest scientific discovery of the age. Nothing like it ever prepared before. It is not a tooth paste but

a simple, harmless preparation that can be applied to the teeth in a few seconds. Immediately the teeth are transformed into gems of pearl white beauty." From the analysis of the American Dental Association it appears that Tartaroff is, for all practical purposes, a mixture of hydrochloric acid and water, with a little coloring matter added. The claim that a 1.2 percent solution of hydrochloric acid is harmless to the teeth is pernicious to a degree.—(*Jour. A. M. A.*, January 5, 1929, p. 73).

SEMAFOR, A DENTOMEDICAL NOSTRUM.—The Indicator Laboratories, Inc., Chicago, put out a preparation, "Semafor," that, it is claimed, "combats unpleasant Breath (Halitosis), Acidity, Mouth Infections (Sepsis), and Tooth Decay, by its Cleansing, Healing, Germicidal Action—and removes sticky film." Semafor is described as the "New Red Purifier that turns White when disorders lurk in mouth and throat." According to the analysis of the chemist of the American Dental Association Semafor is nothing more than a simple saline solution to which a little alcohol, sodium carbonate and an indicator, in the form of phenolphthalein have been added. The selling point of Semafor is that of getting the public to believe that, if the diluted pink Semafor solution, when put in the mouth, is partially or wholly decolorized, the user is suffering from "acid mouth." The fact that normal saliva from perfectly healthy mouths is faintly acid in reaction makes it obvious that the vast majority of people who would use Semafor would find this solution partially decolorized. They will also find, as a matter of course, that if, at the time of using Semafor, they repeatedly rinse their mouths with this alkaline solution, with each rinsing the solution that is ejected will be nearer the normal Semafor solution color. This will further convince the public that their mouths are being "disinfected" although, of course, the product is not a germicide.—(*Jour. A. M. A.*, January 5, 1929, p. 73).

GEORGE A. BREON AND SCIENTIFIC MEDICINE.—No products of George A. Breon or of the George A. Breon Co. have ever been accepted by the Council on Pharmacy and Chemistry for inclusion in New and Nonofficial Remedies. George A. Breon and Co. is a concern that has carried water on both shoulders. On the one hand it appeals to uncritical and unscientific physicians with a series of prescription products that are both uncritical and unscientific; on the other hand, it has made a number of nostrums for fraudulent mail-order concerns and George A. Breon himself is reported to have been the originator of some of the nostrums.—(*Jour. A. M. A.*, January 5, 1929, p. 76).

NARCOSAN AND DRUG ADDICTION.—Narcosan is the "discovery" of one A. S. Horowitz, who came to the United States in 1913 and has been more or less continuously identified with attempts to promulgate cures for all sorts of disorders. There was the Horowitz-Beebe treatment for cancer known as "Autolysin," there were the Merrell Proteogens for the treatment of practically everything, and, finally, there was Narcosan, originally brought out about 1920 under the name "Lipoidal Substances." Lipoidal Substances was not accepted by the Council on Pharmacy and Chemistry, because it was of unestablished composition and the clinical reports were not convincing. In 1926 an article appeared on the subject of Narcosan, which paper had been rejected previously by *The Journal of the American Medical Association*. Since then sensational newspaper articles about Narcosan have appeared. Now a preliminary report of the Mayor's Committee on Drug Addiction of the City of New York has been published. It is signed by the chairman of the committee, Dr. Alexander Lambert, who was one of the authors of the favorable report on Narcosan published in 1926. The committee report is summed up in the closing clause: "Narcosan has no merit as a specific treatment of drug addiction."—(*Jour. A. M. A.*, January 12, 1929, p. 151).

ACTEROL.—Acterol (a preparation containing irradiated ergosterol), it is reported, has been withdrawn from

the market by Mead Johnson & Co. until such time that further animal and clinical experimental studies shall have determined its therapeutic status.—(*Jour. A. M. A.*, January 12, 1929, p. 170).

"INFLUENZA SEROBACTERIN MIXED"—A REVIVAL.—In 1918 the Council on Pharmacy and Chemistry denied admission to New and Nonofficial Remedies of "Influenza Serobacterin Mixed-Mulford," holding that there was no evidence for the value of the mixture and that its use was illogical. Since then nothing has happened to question the soundness of this judgment of the Council. Nevertheless, a circular letter sent to a large industrial concern conveys the impression that "Influenza Serobacterin Mixed" is an effective means of checking influenza and of treating respiratory infections. The apparent conviction by the promulgators of "Influenza Serobacterin Mixed" of the value of their preparation is not the slightest guarantee of their truth. This is merely an ill-considered crude revamping of old notions and phrases, surviving in discredited advertising matter, and now revived during a period of public fears in time of epidemic.—(*Jour. A. M. A.*, January 19, 1929, p. 233).

THE TRICHO SYSTEM.—According to the advertising booklet distributed by "beauty parlors": "Tricho System is the invention of Albert C. Geyser, M.D., a New York physician internationally famous as a specialist on Electro-Therapy." Dr. Geyser claims to have so modified the x-rays that with his apparatus it is possible to produce permanent baldness in hairy areas without any possibility of doing damage to the skin. It is not necessary to tell physicians—at least, those with any extensive dermatological experience—how serious a menace is the use of x-rays in the removal of superfluous hair. The tragedy in the case arises from the fact that the precancerous keratoses and other untoward effects are usually not evident for months after the "treatment" has been given. Further, the victims—nearly always women—frequently refuse to prosecute, because of the inevitable publicity. A few dermatologists have, however, reported cases of the disfiguring and dangerous sequelæ that have followed the use of the Tricho System.—(*Jour. A. M. A.*, January 19, 1929, p. 252).

WHY HAVE INFLUENZA?—The following are a few of the numerous advertisements of products of manufacturers that are capitalizing the present epidemic of influenza: Adlerika, Creomulsion, Bulgarian Herb Tea, Kogene, Glyco Thymoline, Father John's Medicine, Pluto Water, Nujol, Lifebuoy Soap, 666, Vapex, S. S. S., Zonite, Nozol, Musterole, Luden's Menthol Cough Drops, Florida Oranges and Grapefruit.—(*Jour. A. M. A.*, January 19, 1929, p. 253).

MORE INFLUENZA VACCINE PROPAGANDA.—As might have been expected from previous activities of the firm, among the earliest to enter the field in an endeavor to promote vaccine products during the current influenza epidemic has been the G. H. Sherman Company of Detroit. In 1924 the Council condemned the firm's influenza vaccine, particularly because of lack of evidence in its support, and all of the mixed vaccines in general because their use is not in the interest of sound therapy and public health. The more recent literature circulated by Sherman includes the claim that records of Drs. Don C. Sutton, Frederick Tice, Alexander Lambert and William O'Neill Sherman constitute suitable evidence in support of the use of the prophylactic vaccine against this disease. Letters from Drs. Sutton and Sherman cast considerable doubt not only on the statistics and statements cited by G. H. Sherman in support of the use of his preparations but also on the right of that concern to use the material in advertising. For some years the products of G. H. Sherman have not been advertised in any of the publications of the American Medical Association and none stand accepted for New and Nonofficial Remedies at the present time.—(*Jour. A. M. A.*, January 26, 1929, p. 316).

MISBRANDED PHARMACEUTICALS. — During the year 1928 the following pharmaceutical products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture, which enforces the Federal Food and Drugs Act: Cotton Root Bark (Sig. Wallace), containing 9.5 percent of wood, while the National Formulary prescribes that cotton root bark shall contain not more than 5 percent of wood or other foreign matter. Mexican Sarsaparilla Root (Peek & Velsor, Inc.), yielding 9.25 percent of acid-insoluble ash, whereas the Pharmacopeia provided that it shall yield not more than four percent of acid-insoluble ash. Powdered Colocynth Pulp (Peek & Velsor, Inc.), containing 16.4 percent of acid-insoluble ash, whereas the pharmacopeial standard provides that colocynth pulp shall yield not more than six percent of acid-insoluble ash. Fluidextract Cinchona Compound (The Interstate Commerce Company), yielding not more than 0.29 grams of the alkaloids of cinchona per 100 mls. Fluidextract Nox Vomica (The Interstate Commerce Company), differing from the standard of strength, quality and purity laid down by the Pharmacopeia. Tincture of Cinchona Compound (The Interstate Commerce Company), differing from the standard of strength, quality and purity laid down by the Pharmacopeia. Spirits of Nitre (W. H. Crawford Company), sold under a name recognized in the United States Pharmacopeia, but differing from the standard of quality and purity laid down by the Pharmacopeia. Cod Liver Oil (P. R. Dreyer), sold under a name recognized in the United States Pharmacopeia, but differing from the standards set in the Pharmacopeia. Tincture of Opium (The St. Louis Physicians' Supply Company), yielding but 0.72 gram of anhydrous morphine per 100 cc. while the Pharmacopeia requires that tincture of opium shall yield not less than 0.95 gram. Tincture of Nux Vomica (The St. Louis Physicians' Supply Company), containing only 0.150 gram of the alkaloid of nux vomica per 100 mls., whereas the Pharmacopeia provides that tincture of nux vomica shall yield not less than 0.237 gram. Tincture of Cinchona (The St. Louis Physicians' Supply Company), yielding but 0.668 gram of the alkaloid of cinchona per 100 cc., while the Pharmacopeia provides that it shall yield not less than 0.8 gram of the alkaloid. Camphor in Oil (The Tilden Company), containing nearly four grains of camphor per millileter, though represented to contain not more than three grains of camphor per millileter. Quinine Dihydrochloride (The Tilden Company), containing 1.8 grains of quinine dihydrochloride, though claimed to represent 3.75 grains of quinine dihydrochloride per milliliter. Quinine and Urea Hydrochloride Ampuls (The Tilden Company), one portion containing 2.36 grains of quinine and urea hydrochloride per cc., though represented to contain seven grains; another portion containing 2.9 grains of quinine and urea hydrochloride per ampul, though represented to contain five grains. Sodium Iodide Ampuls (The Tilden Company), containing less than the claimed volume of solution. Nitroglycerine Tablets (Moore & Company, Inc.), containing less than the claimed amount of nitroglycerine. Atropine Sulphate Tablets (Moore & Company, Inc.), containing less than the claimed amount of atropine sulphate. Strychnine Sulphate Tablets (Moore & Company, Inc.), containing less than the claimed amount of strychnine sulphate. Ergot (Hugo Frei), having but from $\frac{1}{4}$ to $\frac{1}{3}$ the activity required by the Pharmacopeia for ergot. Tincture of Cinchona Compound (Moore & Company, Inc.), containing less than the required amount of alkaloids of cinchona. Tincture Cinchona (Moore & Company, Inc.), containing less than the required amount of cinchona alkaloids.—(*Jour. A. M. A.*, January 26, 1929, p. 333).

ABSTRACTS

CONTROL OF PUBLIC MILK SUPPLIES

The first law for the control of milk supplies was enacted by the state of Massachusetts in 1856, with the intention of prohibiting the sale of adulterated milk. The office of milk inspector was created in Boston in 1859. However, it was not until later in the nineteenth century and in the early years of the present century that larger cities generally undertook the control of their milk supplies, and even at this late date the work was undertaken slowly. Most of the early regulations and ordinances were directed primarily toward skimming and watering of milk and toward adulteration through the use of preservatives. It is only within the past fifteen or twenty years that attention has been given to sanitation and cleanliness in the production and handling of milk. William F. King, Indianapolis (*Journal A. M. A.*, Aug. 25, 1928), discusses the necessity for control of milk supplies; the important phases of milk control, and the question of why milk supplies should be supervised and controlled. He suggests a state-wide program similar to the one adopted by the Indiana State Board of Health: (1) Maintenance of a central milk laboratory in the department; (2) milk survey; (3) to secure the enactment of effective milk ordinances in all cities of the state; (4) to secure the elimination of tuberculosis and infectious abortion from all dairy herds and from all cows furnishing a public milk supply; (5) intelligent and sympathetic co-operation on the part of the organizations interested in the milk and dairy products industry and to have the same intelligent and sympathetic cooperation on the part of all departments, both state and local that have responsibility and authority, and (6) education of the public. There is no more important responsibility of public health administration than that of protecting and safe-guarding public milk supplies. The practical health officer has observed the marked decrease in typhoid, septic sore throat, diphtheria and scarlet fever from milk-borne infection, coincident with the general introduction of pasteurization. In the light of our present knowledge and experience, complete pasteurization, as the ultimate factor of safety, of all milk and milk products intended for human consumption in any way should be the prime objective in any effort at supervision and control of public milk supplies.

TREATMENT OF NEUROSYPHILIS BY MALARIA

Of 358 patients with neurosyphilis treated by malaria since June, 1924, in the section on Dermatology and Syphilology of the Mayo Clinic, 220 have shown early manifestations of paresis. The evidence accumulated from the observation of these patients warrants the deduction that, for a selected group manifesting early signs of paresis, fever therapy offers the most economical, rapid and efficient means of producing remissions. The use of malaria, however, requires institutional care and an organization with special facilities for such treatment. Treatment by typhoid vaccine, although slightly less efficient than treatment by malaria, does not require institutional care and is an ideal substitute for malaria when the facilities do not permit of the use of the latter. In the nonparetic group of cases the outstanding observation has been the serologic changes. The most pronounced clinical results are noted about one year after the institution of treatment by malaria, and in the same group of cases serologic reversals develop from three to four years after the course of malaria. As a result of these data, Paul A. O'Leary, Rochester, Minnesota (*Journal A. M. A.*, Aug. 25, 1928), recommends treatment by malaria in those cases of neurosyphilis that fail to show favorable clinical and serologic response early in the course of treatment. It is unwise to postpone fever therapy until obvious clinical signs of paresis develop because repeated observations in both the paretic and the nonparetic cases

have shown that the patients who manifest the most benefit are those with the least evidence of parenchymatousnonspecific treatment of syphilis are not engaged in controversy. The arsphenamines, bismuth, tryparsamide, malaria and typhoid vaccine each has a definite field in which it produces the maximal good. Years of experience in large series of cases have demonstrated beyond doubt the value of these various remedies. The task now awaiting the syphilologist is to develop criteria to enable him to determine with a fair degree of certainty the ease in which the special remedies are best suited. O'Leary believes that either tryparsamide or arsphenamine, with intraspinal measures and bismuth or mercury, is definitely indicated following fever therapy, in spite of the fact that in a few cases in which specific therapy following the fever course was refused the clinical and serologic results were excellent.

SYMPTOMS, DIAGNOSIS AND PATHOLOGY OF TULAREMIA

Four clinical types of tularemia have been noted by Edward Francis, Washington, D. C., (*Journal A. M. A.*, Oct. 20, 1928), from a study of 679 case reports: 1. Ulceroglandular type (455 cases).—The primary lesion is a papule of the skin, later an ulcer, and is accompanied by enlargement of the regional lymph glands. 2. Oculoglandular type (thirty-two cases).—The primary lesion is a conjunctivitis and is accompanied by enlargement of the regional lymph glands. 3. Glandular type (twenty-five cases).—There is no primary lesion at the site of infection, but there is enlargement of the regional lymph glands. 4. Typhoid type (twenty-eight cases).—There is no primary lesion nor is there glandular enlargement. (The word "typhoid" is used here in the sense of an absence of manifest external lesions and not as signifying the so-called typhoid state of mind.) No instance has been reported of the spread of the infection from man to man by mere contact or by the bite of insects that have previously bitten a patient. Surgeons who have incised or excised suppurating glands have not contracted the infection. Nurses who have attended these patients have not become ill. Francis discusses the symptoms and course, diagnosis, method of isolating cultures from man, and pathologic conditions in man. He says that pathologists unfamiliar with the lesions in man have tenaciously clung to the diagnosis of tuberculosis until forced to give it up by their failure to demonstrate acid-fast microorganisms or to infect guinea-pigs with tuberculosis. In such cases, the rabbit history and serum agglutination have proved the diagnosis of tularemia.

TREATMENT OF ASPHYXIA IN NEW-BORN

Originality is claimed by Paluel J. Flagg, New York (*Journal A. M. A.*, Sept. 15, 1928), for the practical application of principles which every physician understands in the treatment of asphyxia in the new-born, namely, a simple practical means of inspecting and preparing the respiratory tract for the deliberate and exact introduction into it, at a point beyond the possibility of anatomic obstruction, of a measured volume of a known mixture of oxygen and carbon dioxide under the most sensitive conditions of manometer pressure at our disposal. There appears to be some difference of opinion among observers as to the amount of amniotic fluid and detritus normally present in the new-born infant's respiratory tract. However, no attempt at artificial respiration should ever be made until the mouth and the throat have been sucked free of fluid and until direct vision confirms the freedom of the airway. The soft, yielding tissue of the new-born child, the complete relaxation that accompanies the asphyxia of the new-born, the absence of teeth, the relatively large mouth and the short distance between the gums and the glottis provide ideal conditions for easy and nontraumatic exposure of the glottis. As the reflexes reappear, a perfectly simple exposure becomes much more difficult. It may be reiterated that the con-

ditions favoring intubation are in direct proportion to the need, and that laryngeal reflexes return with the activity of the respiratory center. To expose the larynx, the baby is made to lie on a table, flat on its back; the head is moderately extended, the chin being kept in the mid line. The lips are separated, and the mouth is opened with the thumb and the forefinger of the right hand. The author's illuminated speculum is made to pass gently over the tongue until the epiglottis is exposed. The hypopharynx is now in full view; and secretion present should be removed by suction. The lip of the laryngoscope is now made to pass just beneath the epiglottis. Care must be taken that the lip of the laryngoscope does not pass over the larynx, as the distance between the epiglottis and the glottis is very short. In fact, it is sometimes practical to lift the tongue, exposing the epiglottis and the glottis simultaneously. If, during the examination, no reflex activity of the glottis is observed, the intratracheal suction tube should be passed between the cords and into the trachea to clear it of fluid. If there is still no laryngeal reflex or only a very faint response, the intratracheal insufflation tube should be inserted, and oxygen and carbon dioxide allowed to flow into the trachea. Partial or complete closure of the intratracheal tube orifice will distend the lungs to a degree to which the manometer is set. When the laryngeal reflexes have returned and have become active, the tracheal tube should be removed, and the pharyngeal tube substituted. Where oxygen and carbon dioxide are used for stimulation of depressed respiration, the pharynx should be exposed and cleared. The reflexes having been found active, intubation is dispensed with, and the pharyngeal tube is employed. It is recommended that the respiration be interrupted by placing the thumb on the intratracheal tube every fifteen to twenty seconds. It is to be remembered that oxygen or carbon dioxide in the trachea and the bronchi, even though under little pressure, is absorbed by diffusion. The equipment assembled by Flagg is a one-man outfit, and consists of small tanks of oxygen and carbon dioxide which are easily portable and may be stored. The gas in these small tanks is under a high pressure, necessitating a reducing valve with a pressure gage, indicating the amount of gas remaining in the tank, and there is a specially constructed water manometer, the suction outfit, the intratracheal tube, the pharyngeal insufflation tube and the laryngoscope. The assembly described is protected by a container. This container permits transportation and offers the facilities of a stand and table, when in use. After use, all instruments are cleaned, sterilized, and put away in a sterile container, ready for immediate use.

CLINICAL SIGNIFICANCE OF CARDIAC ASTHMA

In a group of 250 patients with cardiac asthma discovered in the past few years among 3,100 private and hospital patients with organic heart disease (eight percent), and analyzed by ROBERT S. PALMER and PAUL D. WHITE, Boston (*Journal A. M. A.*, Feb. 9, 1929), 180 were males and seventy females, and all but fourteen were over forty years of age. The grave prognostic significance of the condition is shown by the fact that 170 of the 250 patients are known to have died, with an average duration of life of 1.4 years after the first attack of cardiac asthma. The largest number of cases, 187, was found in the group of patients with coronary disease, hypertension, or both (10.7 percent of this etiologic group), but the highest relative incidence occurred in syphilitic heart disease (twenty-one percent) and in chronic nephritis (nineteen percent). Left ventricular failure due to any one or a combination of several factors appears responsible for cardiac asthma, but the exact mechanism is not clear. The frequency, duration and severity of the attacks altered the prognosis appreciably only when of extreme degree. The coincidence of poor

(Continued on Adv. Page xx)

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ABSTRACTS

(Continued from Page 134)

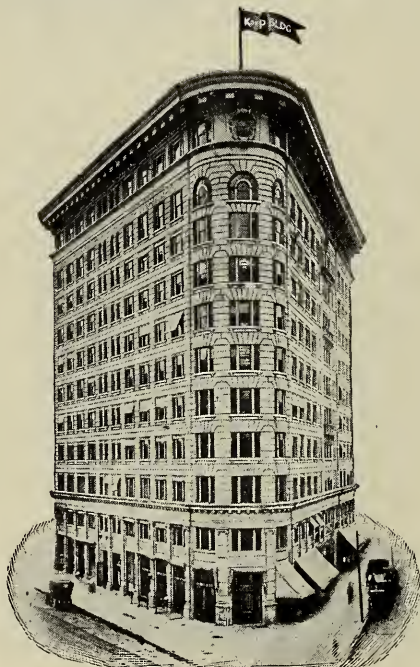
heart sounds, gallop rhythm and pulsus alternans indicated, as a rule, a very short life. Aortic regurgitation, usually of syphilitic origin, was the only common valve defect (sixty-three cases of the 250). In therapy, digitalis and rest were generally effective in reducing the number of attacks and apparently in prolonging life; for the treatment of acute attacks nitrites and alcohol were sometimes helpful, but morphine was of the greatest value.

TREATMENT OF DUODENAL AND FECAL FISTULA

CARYL A. POTTER, St. Joseph, Mo. (*Journal A. M. A.*, Feb. 2, 1929), favors medical treatment of these cases and asserts that it will practically supplant surgery in the treatment of fecal fistulas in the majority of cases. Intestinal fistulas are less persistent and less resistant to treatment in proportion to their distance from the duodenum because of the dilution of the pancreatic juice by its mixture with other intestinal secretions and the products of intestinal digestion lower down. Under normal conditions the fecal content is more solid the more nearly it approaches the rectum. A diarrhea *per se* or induced by a purgative increases the volume of pancreatic juice and liquefaction of fecal content and consequently the irritation and digestion of the abdominal wall. It is, therefore, wise to attempt to bring about constipation in the patient by placing him on a boiled milk diet. Boiled milk, in addition to its constipating effect, supplies intra-intestinal protein for the digestive action of pancreatic juice, and so tends to cut down the excess. From four to six ounces (120 to 175 cc.) of boiled skimmed milk is given every four hours. The oral administration of from one-tenth to one-fifth grain (seven

to eleven mg.) of powdered opium, every two, or three hours, tends to decrease peristalsis and lower intestinal pressure. If secondary anemia occurs, blood transfusions and intravenous injections of iron, are given. Ordinary methods to combat local infections are used. The toxemia, starvation and alkalosis are overcome by hypodermoclyses and the intravenous administration of hypertonic salt solution and dextrose, with indicated amounts of insulin when large amounts of dextrose are used. The keynote of the treatment, however, is the local application of tenth-normal hydrochloric acid and sterile beef juice. The former is used to overcome the alkalinity of the intestinal content, as pancreatic juice becomes inactivated in an acid medium. The latter supplies a foreign protein, with which the pancreatic juice first comes in contact and digests it instead of the abdominal wall. The beef juice and hydrochloric acid treatment applies more particularly to fistula of the duodenum and small intestine than those of the large intestine; *i. e.*, when patients have a tendency to loose bowel movements which contain a high ratio of pancreatic juice. Fistulas of the large intestine in an otherwise normal bowel usually heal spontaneously, unless there is a large defect in the bowel wall and mucous membrane, such as is present when a large area of the wall of the large intestine has sloughed out or been removed in surgical colostomies. If, however, there is skin irritation during the process of healing, this is direct evidence that an excess of pancreatic juice is present and the beef juice and hydrochloric acid will eliminate the erosions of the skin and abdominal wall caused by it. Persistent fecal fistulas in which irritation or digestion of the abdominal wall from pancreatic juice is not the causative factor will, of course, have to be closed by means of surgery. But the persistence of most fecal fistulas is due to irritation from pancreatic juice in a semisolid or liquid fecal content. In the large intestine the action of the pancreatic juice is attenuated and the fecal content is more solid.

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ORIGINAL ARTICLES

UNDULANT FEVER*

RECENT STUDIES

A. S. GIORDANO, M.D.

SOUTH BEND

Undulant fever is a specific disease caused by a group of bacteria called *Brucella alkaligenes*. In this group there are several strains which are now classified according to the animal from which they are isolated. The three strains which are best known at present are: caprine, bovine, and porcine. The caprine strains (*Brucella melitensis*) were first isolated and described by Bruce in 1887. He cultured them from the spleen of a patient with Malta fever. Bruce definitely showed that the disease is propagated by the consumption of raw milk obtained from infected goats. Because of the prevalence of this disease on the Island of Malta it was called Malta fever. The clinical course of the disease is well known in the European countries bordering on the Mediterranean Sea, and is characterized by attacks of undulatory pyrexial relapses, profuse sweats, rheumatic pains, arthritis, and enlarged spleen.²⁶

Another strain, now known as *Brucella abortus* (Bang), was isolated by Bang in 1897 from the placenta of aborting cattle, but it was not known to be pathogenic for man although Larson and Sedgwick, in 1913, first suggested this possibility. This was again suggested by Evans,⁹ who showed the remarkable similarity between *Brucella melitensis* and *Brucella abortus*. However, it remained for Carpenter,⁷ in 1924, to prove definitely the pathogenicity of *Brucella abortus* for man by fulfilling Koch's postulates. Since his publication many cases have been reported in our various states and in Europe.

The porcine strain isolated in 1914 by Traum is also pathogenic for man and is most prevalent among persons handling uncooked pork.

Because of the wide geographic distribution of undulant fever and the increasing number of cases now being recognized, the matter assumes a problem of great magnitude, deserving the careful con-

sideration of clinicians and public health officials in order to check its progress.

It is because of this aspect of the subject that I became interested in the examination of all blood sent to the South Bend Medical Laboratory for Wassermann, Widal, and blood chemistry tests.¹² The blood was from patients admitted to two general hospitals in South Bend, patients from a venereal clinic, private patients of general practitioners in South Bend and the surrounding territory, and a group of one hundred apparently healthy students from the University of Notre Dame. All specimens were routinely examined for the presence or absence of agglutinins specific for the *Brucella melitensis* group.

Eleven hundred specimens of blood were examined by two methods for the presence of agglutinins specific for the *Brucella melitensis* group. Agglutination occurred in sixty-three (5.7 percent). Ten of these were from patients in a sanatorium for tuberculosis; this is 8 percent of a total of 125 of such patients who were examined. Four were from a group of one hundred apparently healthy young adults. In fourteen cases there were exhibited typical, active symptoms of undulant fever. The agglutinating titer of the blood in these cases ranged from 1:10 to 1:5,000. In twelve cases there was a definite history of previous infection with *Brucella abortus* and the titer of the blood ranged from 1:10 to 1:320. Of the thirty-seven cases in which the titer was less than 1:40, five patients had suggestive histories of possible *Brucella abortus* infection; fifteen had a history in no way suggestive of infection with *Brucella abortus*, and seven had no available history. The titer in the majority of these cases was positive in a dilution of 1:10 or less.

A comparison of the results of this investigation with the findings of other workers shows agreement in general. Evans¹⁰ found that in 500 specimens of serum examined 11.8 percent reacted to *Brucella abortus* antigen in dilutions of from 1:5 to 1:320. Hull and Black reported sixty-nine cases of fever, in five of which there was reaction in a dilution of 1:200 or higher. Larson and Sedgwick found 17 percent of 425 children's serums positive. It is significant that among children fed on milk from cows known to be free from

*Read before the Thirteenth District Medical Society, September, 1928.

infection with *Brucella abortus* no reaction was noted. McAlpine and Mickle, in an examination of 10,000 specimens of serum, found 0.6 percent positive in a dilution of 1:25 or higher. Tests were not made in lower dilutions. Carpenter and King reported a similar study, recording agglutination from 1:10 and higher in 7 percent of 4,000 serums examined. Litterer in a similar study reported about 5 percent incidence.

Distribution Among Animals: Veterinarians have known for years that most lactating animals can be infected by these various strains. The disease, because of its wide distribution, presents a great economic problem in the dairy industry. In some of the states where careful surveys have been made the prevalence has been reported in as much as 90 percent (Connecticut) of the herds, and practically no region is free from it. In spite of this, very little has been done to check the disease among herds, not to speak of protection to man.

Why is it, then, that the number of cases is so small, comparatively speaking, since it has been definitely established that *Brucella abortus* infection has existed among cattle since 1893 and earlier? Pasteurization is comparatively new and limited. There are at least two answers to the question:

First, the disease has been overlooked, as attested by Bassett-Smith. He states that even in the Mediterranean countries, where the disease is endemic, the condition is overlooked because of its variety of forms, and patients are treated for something else. This is further supported by the multiplicity of names coined by physicians living in the endemic regions for the syndromes satisfied by the general course of Malta fever. If this is true of Malta fever in its normal habitat, how much more likely is it that the bovine type of the disease is overlooked in this country where the clinical consciousness of the disease is still on such a low level! As a matter of fact, most of the cases reported heretofore have been diagnosed by laboratory workers, here in South Bend as well as elsewhere. The local Board of Health, under the active leadership of Dr. J. B. Berteling, has proposed a milk ordinance prohibiting the sale of unpasteurized milk in South Bend. This ordinance was passed by the City Council and has since been in operation. In addition to this publicity, Dr. Sensenich and I published a clinical study of the first seven cases. In spite of this warning I discovered another case the following month in a member of the profession near South Bend. If medical men have so ignored the warning, what can be expected from the laity?

The second explanation is that recently advanced by Smith in his presidential address to the Congress of Physicians and Surgeons. He believes that the bovine type of *Brucella abortus* (Bang) is not pathogenic for man since in man, although he has been repeatedly exposed to the

disease for years, the infection has made its appearance only during the past three or four years. He believes that the porcine strain is the one responsible for the infection in man in America and that it developed in the Middle West by the association of cattle and swine. The organism as it has passed through the new host has undergone biologic changes which may have modified its pathogenicity for man. Smith's opinions carry great weight because of his contributions to the knowledge of infectious diseases in animals and their relation to man. The melitensis infection is more pathogenic for man, and the disease is more severe than the present bovine strain in the cases observed.

Life History in Cattle: The organism enters through the gastro-intestinal tract and spreads throughout the body. Pregnant cows that become infected usually abort. The infected cow does not appear sick and usually aborts only once, but may abort two or three times before recovering from the infection. The organisms are excreted with the uterine discharges, with urine, and milk. Thus, infection is spread to cow and man. The condition may clear up entirely or render the animal sterile because of the uterine infection, or the output of milk may decrease because of fibrosis of the udder. Transmission by coitus is also said to occur; this is evidenced by the orchitis frequently found in bulls. This, however, may be a hematogenous infection which also occurs in man when there has been consumption of infected raw milk. Suckling calves become infected from the milk; however, this infection is only temporary and leads to no degree of immunity, for when the calves are bred and artificially infected abortion takes place.

The melitensis strain also produces abortion in goats, but Hughes, who has observed more than 900 cases of Malta fever in Europe, never found abortion in woman although several infections occurred during pregnancy.

The bovine strains are difficult to isolate either from man or cow. They grow best in an atmosphere of 10 percent CO₂ and on a special medium described by Huddleson. The porcine strain grows readily in ordinary atmosphere and on ordinary laboratory media. The organism is a minute bacillus, so small that it is often mistaken for a coccus. At present there are three methods that are of promise in differentiating these strains: (1) agglutinin absorption test, (2) growth on media with differential dyes, and (3) growth on sugar media. Meyer and his associates arrange all these strains into four groups like the pneumococci. An important point to bear in mind is that even though a certain strain is isolated from a cow, it does not necessarily follow that the strain is of bovine origin.

Pathogenicity: It has been doubted that the strain *Brucella abortus* (Bang) is pathogenic for man. This doubt is based on epidemiologic and

experimental evidence. At present there is no absolute method of differentiating the various strains or of excluding the possibility that *Brucella melitensis* may have been introduced into other animals, as swine, horse, and cow. In these cases there might be the possibility that during animal passage it would undergo certain biologic changes which would lower its pathogenicity for man and alter its metabolism so that it would react to various dyes differently than the strains propagated in goats. Such a supposition would be in full agreement with recent studies by Huddleson¹⁸ and McAlpine²⁰ and explain satisfactorily why the infection is not more widespread.

The experimental evidence denying the pathogenicity of *Brucella abortus* for man has been presented by Cooledge in America, and by Nicolle, Burnet, and Conseil in France. These authors have, with negative results, fed to volunteers pure cultures of *Brucella abortus* consisting of several different bovine and two porcine strains. Such conclusive experiments are difficult to deny. Other supporting epidemiologic evidence is that although *Brucella abortus* infection is widespread among the herds of Germany, undulant fever has not been prominent. My own survey reveals data in support of this observation. In the group of sera agglutinating *Brucella abortus* and *Brucella melitensis* strains, there are six instances in which the patients have lived on farms and have partaken of raw milk from herds in which abortive disease was present and none of these patients has ever had any symptoms suggesting undulant fever.

As already stated, the fact that a strain is isolated from a cow does not necessarily imply that such a strain is a pure bovine strain. The following two cases substantiate this view. The serum of two patients (cases 12 and 18)¹² agglutinated *Brucella melitensis* almost exclusively: *Brucella melitensis* 1:1800; *Brucella abortus* 1:10. These patients had never had contact with goats and had never partaken of goat's milk products, suggesting that their infections must have originated from the melitensis group of bovine source. Another factor involved in the explanation of the low incidence of the infection in man is the variation of susceptibility in different persons. Recently an epidemic occurred in a boarding school of several hundred students who consumed milk from the college herd, which was infected with *Brucella abortus*. Infection occurred in only 15 students,²⁸ which is a relatively low incidence even when the factors of dilution and the variation of intake of milk for each student is considered.

Clinical Data: Sex does not seem to be a factor. Kern, who recently analyzed the cases collected in the literature, reported that there were twenty-five males, seven females, and four in which the sex was not stated. According to an analysis of my own data there were thirteen males

and fourteen females. The incidence by decades was as follows:

AGE, YEARS	CASES
10 to 20.....	1
21 to 30.....	4
31 to 40.....	11
41 to 50.....	8
51 to 60.....	3

In the total of twenty-seven cases there is a preponderance of infection in the fourth decade (eleven cases), closely followed by the fifth decade (eight cases). The youngest patient is sixteen and the oldest sixty-one years of age. The reports in the literature show a low incidence in children. In my own cases the greatest number of specimens of blood examined were from adults in the fourth and fifth decades, with relatively few in the first and second decades.

Occupation: Occupation plays a definite part in the etiology of the disease because of the chance of infection by contact, as occurs among (1) veterinarians who are called on to extract retained placenta from aborting cows; (2) handlers of raw meat, as butchers and meat inspectors, and (3) laboratory workers dealing with cultures of the organisms. However, in the cases reported here there was only one, or possibly two, of the twenty-seven cases in which occupation may have been a factor.

Residence: As one might expect, the incidence in small communities is usually much larger since it is unlikely that there are pasteurization plants in such localities, and raw milk is more generally consumed. Among the twenty-seven cases only six lived in towns of more than 50,000 inhabitants. The remaining cases occurred in small communities of less than 20,000. The importance of abortus infection as a rural health problem is at once apparent, since in all of the cases reported raw milk was consumed.

Clinical Picture: The clinical picture is typical in the majority of instances when the disease has an acute onset, yet there are many gradations of acuteness and chronicity. However, even when it occurs in its acute forms it cannot be differentiated from other acute infections without serologic and bacteriologic evidence. This explains why the disease has escaped attention for so long.

Previously cases that could not be classified under malaria-typhoid-dysentery group, pyelitis, focal infection, endocarditis, or pulmonary tuberculosis were left as unclassified. The low incidence of the disease did not arouse suspicion and physicians did not consider the disease since no one had previously directed attention to it. The number of reports in the literature during the past year shows that physicians are looking for it. Six of the twenty-seven cases that have come to my attention during the past year were referred during the past three months. Consequently, with a widespread clinical appreciation of this infection and

frequent use of the agglutination test, the actual incidence should soon be known.

Incubation: The incubation period of from six to fourteen days, as given for Malta fever, apparently applies also to the abortus type. Several infections in the laboratory could definitely be dated from the appearance of symptoms and the period varied from seven to twelve days.

Mode of Onset: The onset of the disease is usually preceded by vague symptoms, as slight loss of appetite, mild headache, or pain in the joints. If mild fever occurred the patients were not aware of it. Then, in the majority of instances, this was followed by sudden rise of temperature varying from one hundred to one hundred and two degrees Fahrenheit, chills occurring at varying intervals, and accompanied by sweats. Headache was present in twenty-five of the twenty-seven cases and in many instances was severe and had the tendency to localize in the occipital or cervical region. Distaste for food equalled headache in frequency. Shifting pains in joints occurred in all the cases; the lumbar region was affected more frequently than any other joint. As a rule, these pains are relieved by heat and not by salicylates. Pulmonary symptoms such as cough or mild bronchitis were frequent, usually ushering in the disease and leading to the diagnosis of influenza or tuberculosis. The temperature is quite characteristic. In most cases it was normal from 6:00 to 9:00 or 10:00 a. m. and then it gradually rose until the peak was reached, during late afternoon or early evening; then it gradually fell until into the night; in some cases another peak was established during this time. The peak in temperature was usually accompanied by chilliness and later by profuse sweats. Orchitis or oophoritis were frequently associated. The duration of the acute symptoms varied from two weeks to four months; the recurrences, as a rule, have been relatively less severe in character. Muscular weakness which occurred in more than 96 percent of the cases is one of the most serious complications because it often disables the person even though no fever is present. The same is true of backache.

Nervous symptoms were variable. Neuritis was often present in the fingers and occasionally over both eyes. Nervousness and mental depression were constant symptoms and occasionally were accompanied by insomnia.

Gastro-intestinal symptoms are less frequent. Anorexia and constipation are the most common, while nausea, vomiting and epigastric distress occurred in few instances. In one patient the symptoms of cholecystitis were so marked as to lead the surgeon to drain the gallbladder, but there was no apparent relief of the symptoms.

The acute symptoms gradually abate, appetite returns with the increase of weight; headache becomes intermittent and the fever subsides and eventually disappears either by lysis or pseudo-

crisis. The patients who are less acutely ill soon become ambulatory and return to work in spite of the mild fever, aches, and pains, while others are again forced to bed as soon as they attempt physical exercise, and they may have severe relapse.

Pulse and respiration were usually elevated in proportion to the temperature. In two patients tachycardia developed in absence of apparent cardiac lesion.

Abortion, as has already been stated, was never observed by Hughes in patients with melitensis infection. In America there have been reports of abortion occurring in farmers' wives at a time when abortive disease was prevalent among their herds, but these cases were not investigated to prove the casual relationship of abortus infection. In this series of fourteen female patients, three gave histories of abortion.

Skin manifestations occurred in six patients. These occurred as tubercle-like elevations on the dorsal surface of the hands and the body. In one patient the face was also involved and in another the lesions were macular patches involving the face, arms, and chest.

The findings in a physical examination are usually negative. The positive findings depend on the local manifestations already outlined. The joint findings are variable; some have swelling and tenderness which may be intermittent. Others have no apparent physical changes around the joints to account for the symptoms.

The duration of the first attack in twenty of the patients is as follows:

TIME	CASES
2 weeks -----	2
4 weeks -----	5
2 months -----	6
3 months -----	2
6 months -----	5

In the other patients the history was not definite enough to be of value.

Relapses were observed in eight patients. As a rule these relapses consisted of return of fever, headache, and joint pains for a period varying from a few days to several weeks, but in no instance was the duration of the relapse so long or severe as the original attack.

The observation of these patients to date is too short to warrant a statement of the ultimate outcome; however, twenty-three of the twenty-seven patients are following their usual occupations, although it is with a slight decrease of their full capacity.

Morbid Anatomy: The material from man is too meager to give any accurate data. In the case of one death reported by Moore and Carpenter septic splenomegaly was revealed at necropsy. Scott and Saphir reported the presence of ulcerative endocarditis with the isolation of *Brucella*

abortus. Hughes also reported ulcerative endocarditis in four necropsies. Huddleson reported enlarged spleen in one case and normal-sized spleen in another.

Animal experiments show that the *melitensis* strains are more invasive than the *abortus* type. The parts of the body attacked are lymph nodes, spleen, liver, and joints. The lesions produced in the spleen and liver resemble discrete miliary tubercles. Microscopically these tubercles have a zone of central necrosis with usually more polynuclear reaction than tuberculosis and occasionally even giant cells are found. Agglutinins appear in the blood of the infected animals and gradually, with recovery, fall to a low level.

Clinical Pathology: The leukocyte count early in the disease is usually diminished. The lowest count was 2,800 and the highest 14,000. Later this reaches normal level and varies from 6,000 to 10,000. The differential count is usually normal, or there may be a slight increase in mononuclears, but this too is a variable factor. The erythrocyte count and the hemoglobin always have been well within normal limits. Urine is essentially negative. Blood cultures have been extremely difficult to obtain in this series but of twenty cultures only two positives were obtained. In one patient, on the second attempt, a few colonies were grown on Huddleson's liver agar media in ten percent CO₂ atmosphere while the guinea-pig inoculations were negative. In another patient the guinea-pig inoculation was positive and the culture negative. It appears that positive cultures are more likely to be obtained at the height of temperature.

The Agglutination Test: There is no dispute that the agglutination reaction is the most valuable sign in the diagnosis of undulant fever. In the majority of instances agglutinins appear early in the course of the disease. There are several reports in the literature of patients with no agglutinins in the blood serum but with positive blood cultures. Tramontano in sixty-five confirmed cases of undulant fever found nine serums which failed to agglutinate. Carpenter isolated the organism in five cases of undulant fever, in only three of which agglutinins were present. My own cases suggest this possibility, but further investigation of this point is indicated.

Fici's statement that serums from tuberculous patients present no special property toward *Brucella melitensis* is in accord with my own findings. Only 8 percent of my series of 125 serums from patients in a sanatorium for tuberculosis were positive. In six of these cases in which there was agglutination for *Brucella abortus* in a dilution of 1:20, the diagnosis of tuberculosis had not been confirmed by sputum analysis or by roentgenograms. One patient also gave a positive intradermal reaction with *Brucella abortus* antigen.

The agglutinin titer varies from 1:5 to 1:20,000. Serums agglutinating *Brucella meliten-*

sis or *Brucella abortus* in a dilution of 1:40 or higher, it is generally agreed, indicate active infection with these organisms, but the significance of agglutination in low titer is still open to discussion. It has been suggested that absorption of agglutinins from ingested milk may take place. This seems a little difficult to understand in view of the original low agglutinin content of milk. It is also known that absorbed agglutinins are excreted rapidly, yet in our experience some patients with agglutinins in the blood had not consumed milk for months previous to the test. Others regard these agglutinins as non-specific. Evans believes the agglutinins arise as a specific response to infection with *Brucella abortus* ingested with cow's milk, although such an infection may not result in illness. A study of my series seems to substantiate this conclusion.

Agglutinins may result from an old infection from which the patient has entirely recovered. They may be present in the blood of a carrier. This assumes a focus of infection and constant agglutinin production to combat the organisms released or they may be the response to a recent active infection. Instances of the carrier state have been cited by Shaw. He was able to isolate *Brucella melitensis* from the blood of ten Maltese dockyard employees, none of whom exhibited symptoms. Vaccaro also isolated the organism from the urine of a patient who was apparently well but whose blood contained agglutinins for *Brucella melitensis*.

In the present study most of the serums from actively ill patients agglutinated in dilutions higher than 1:160. On the other hand, in two active cases the serum did not agglutinate in more than 1:10 dilution. In general it can be stated that the agglutinin bears no relation to the activity of the illness and the agglutinins remain in the blood for more than ten years. My own study of this problem has convinced me of the necessity of using several strains of this organism in the routine test. This was shown in Case 18. This patient gave a history of at least three years of recurring attacks of fever, chills, headache and excruciating lumbar pain. He had been under medical supervision for a long period. Preliminary agglutination with *Brucella abortus* (No. 80, Myers) was negative. Because of the dominant symptoms of this disease, seven other strains were used, including one paramelitensis and two other melitensis strains of ascertained origin. This subsequently showed complete agglutination of *Brucella melitensis* in dilutions up to 1:1,800 with all melitensis strains. Another complication that is occasionally encountered is the so-called zone phenomenon or pre-agglutinoid zone in which agglutinations occur only in high dilutions, none being lower than 1:640. Cross agglutination with *Bacterium tularensis* was reported recently by Francis

and Evans, but the difference in the titer clears the diagnosis.

Agglutination Titer and Prognosis: On the basis of the present data, as has been stated already, there is no relation between the titer of agglutinins and the severity of the infection. Usually, however, the titer gradually falls as the patient recovers, but a proportionately high titer is maintained for at least one year or more.

Immunity: At present there are no available data on this subject, but with present knowledge one might infer that natural immunity is present in many.

Diagnosis: The more cases I observe of this and other infections, the more I am convinced that the diagnosis of undulant fever rests with the laboratory. The early clinical picture is common for many infectious diseases. The symptoms of fever, chills, sweats, weakness, loss of weight, and arthritis may be present in tuberculosis, typhoid fever, rheumatic fever, endocarditis, malaria, pelvic infections, pyelitis, influenza, and focal infections.

Recently I saw a patient with focal infection with symptoms suggestive of undulant fever that cleared up on removal of infected teeth. Another case was that of a child with a typical history of undulant fever and with an obscure gumboil that quickly cleared up on drainage.

Consequently, the differential test lies with the clinical pathologist.

Dermal Test: The difficulties associated with the clinical diagnosis have long been recognized. In Europe, where this problem is of considerable importance, investigators have attempted to develop a skin reaction to help in the diagnosis of doubtful cases in which the agglutination test is negative. Burnet first introduced this test in Europe. He reported satisfactory results from the injection of broth filtrates intracutaneously. Other investigators have refuted Burnet's results. Mitra, and later Bua, used killed organisms in salt suspension and injected them intracutaneously. They reported specific reactions in all instances.

I have repeated this work and found broth filtrates to be of no value. On the other hand, on injecting salt suspensions of dead *Brucella abortus*, very specific reactions occurred in known positive cases. Through the courtesy of Dr. St. C. Darden, superintendent of the Healthwin Hospital, seventy-five patients were tested. All of these patients were previously tested for *Brucella melitensis* and *Brucella abortus* agglutinins with negative results in seventy-four. Later, 0.2 c.c. of killed *Brucella abortus* (Clark) of known strength were injected intradermally and no reactions occurred in seventy-four cases. One positive reaction occurred in a patient with positive *Brucella abortus* agglutination; the history and clinical findings were not those of tuberculosis.

This skin reaction was tried in twelve patients

with active undulant fever and in all of these very severe reactions occurred locally.

A positive reaction usually appears in from twelve to forty-eight hours and is manifest by local redness and heat. Later there develops an induration underneath the point of injection and this may disappear in from three to six days or develop into a local granulomatous lesion resembling a boil with a grayish point suggesting underlying pus; but three of such lesions were incised and neither pus nor bacteria were found. Another factor which may cause some alarm is the development of a few red streaks pointing up the arm, suggesting lymphangitis, but this appears within the first six hours and disappears the following day. Finally, healing takes place in from three to four weeks, leaving a discolored scar. On retesting in all of the control cases in which there was previous negative agglutination reaction, agglutinins developed in seventy percent of them and were still present six months later.

Another observation worthy of consideration is the raising of the serum titer in nearly all of the positive cases. This may be of importance in the consideration of vaccine therapy.

Because of the severity of these reactions, I am at present investigating the effect of different strains in order to determine what degree of specific response may exist between various strains.

Treatment: On the basis of present knowledge the treatment of choice is symptomatic, with rest in bed until the temperature has been normal for a week; after that physical exercise may be taken gradually. This is imperative in severe cases. In milder cases occupation was resumed after a few days in bed, without any apparent ill effect in at least three patients of this series.

On reviewing the literature, one finds that numerous attempts have been made with chemotherapy and immune sera. The reports with chemotherapy, particularly mercurochrome, are conflicting. In view of the danger of this drug and the fact that this illness has a low mortality index, it seems to me contraindicated and does not justify exposing the patient to such a danger. Dr. S. A. Clark and I tried neutral acriflavin on cattle, as suggested by the Georgia Experimental Station, but we obtained no apparent results. I gave the drug to one patient on the third week of the disease and it produced a severe reaction with subsequent disappearance of fever.

Baker, at the last meeting of the American Physicians at Washington, reported beneficial results in a case of intermittent hydro-arthritis, but subsequent results revealed that a relapse had occurred in this patient. Moss at Johns Hopkins treated another case of undulant fever with convalescing serum but with no startling results. I have tried convalescing serum on one patient after first having tried salvarsan. The immediate effects were negative but a week later the patient began

to improve. Just as good results can be obtained in the cases of the remaining patients in which no specific therapy or chemotherapy was attempted. One patient completely recovered after four weeks of acute illness with only a slight relapse of a few days. Another patient after two months in bed also recovered and as yet has not suffered relapse. I feel, however, that nearly all of the patients treated were probably on the point of cure anyway.

Vaccine therapy has been extensively tried in Europe with melitensis infections but with no general agreement, although it is promising.

Prophylaxis: The prophylactic measures are apparent. The important thing is to convince the profession and through them instruct the public that the use of raw milk should be avoided, including the so-called certified milk under the present standard of certified milk. At present this standard does certify that the herds are tuberculin-tested, but does not certify that they are free from abortus disease. Milk products, such as butter and cheese, not prepared from pasteurized milk or cream, should be avoided.

In attacking the disease at source, the problem assumes vast proportions because of the widespread prevalence of the disease in cattle. Education of dairymen will require years and the careful raising of abortus-free stock will be expensive at the outset, but the benefits accruing from this will repay the attempt just as it has in tuberculosis. Organized instruction through state and government agencies would probably be the most far-reaching, and city protection through absolute pasteurization laws such as have been adopted in South Bend, would bring almost immediate results.

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A STUDY OF CESAREAN SECTION MORTALITY IN INDIANAPOLIS

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Cesarean section having become a more and more frequent means of termination of pregnancy and labor, it seems wise that each medical community should consider the danger accompanying the procedure in that community. Such consideration may result in more conservative obstetrics and a better knowledge of the indications and limitations of the several types of Cesarean section.

In four Indianapolis hospitals from November 1, 1927, to November 1, 1928, the Cesarean Section statistics were as follows: (Complete records were not available in a fifth hospital).

Hosp.	Del.	Cesarean Sections	Maternal Deaths	Maternal Death Rate
A	741	45	6	13.3%
B	631	29	5	17.2
C	487	26	1	3.8
D	174	6	0	0
Totals—	2033	106	12	11.3%

Hosp.	Fetal Deaths	Fetal Death Rate	Incidence of Cesarean Section
A	6	13.3%	1-16.4
B	1	3.4	1-21
C	2	7.6	1-18.6
D	0	0	1-29
	9	8.7%	1-19

In view of obstetrical and surgical progress in recent years the existing maternal mortality for Cesarean Section of 11.3% is rather startling. One of two conclusions must be drawn: Either we

have been too glib in speaking of the lack of danger connected with the procedure or we have not been sufficiently diligent in applying present-day obstetrical knowledge.

These statistics were not compiled for the purpose of passing judgment on individual fatalities or the wide variation in incidence and mortality rates among the hospitals concerned. These are questions for the various hospital staffs.

It is our purpose, by a presentation of these facts, to direct attention towards methods of reducing this mortality.

One obvious means of reducing Cesarean section deaths is the elimination of needless Cesarean sections.

Cesarean section is sometimes done because it is the easy way out for the operator, or because it is the method of delivery with which he personally is most familiar. Pressure from the patient's family, or fatigue and loss of sleep on the part of the accoucheur, are understandable reasons for a desire on his part to terminate the case, but these are not good obstetrical indications for a major surgical procedure. Careful consideration of the individual patient, to be sure that no other method of delivery would be less hazardous, is more to the point.

Too many Cesarean sections are still being done on two classes of women, namely, those with borderline pelves, and second, eclamptics.

Pelvimetry and fetometry have become valuable aids in prognosis but cannot be applied with mathematical precision except in cases of absolute disproportion. Trial labor in women with borderline pelves is always indicated before Cesarean section, because engagement will often occur where we did not expect it. If an adequate trial labor is not given to such women, needless Cesarean sections will result.

Eclampsia *per se* as an indication for Cesarean section is bad obstetrics, because eclamptics are always bad operative risks. Abdominal section may be indicated in eclampsia after medical treatment has failed, but only rarely is this the case. Erdley Holland¹ in his classic review in Great Britain and Ireland from 1911 to 1920 gives Cesarean section mortality on eclamptics as 32 percent. Peterson² gives 34.8 percent as the maternal mortality rate in 500 abdominal sections for eclampsia, while Welz³ gives 42.7 percent as the death rate following Cesarean section on eclamptics in Detroit in 1926. In Indianapolis last year six Cesarean sections were done on eclamptics with two deaths, a mortality rate of 33 1/3 percent.

In contrast to these high death rates, consider Straganoff's⁴ report in 1911 of 600 cases of eclampsia treated conservatively with only eight percent mortality, the Dublin report⁴ of 204 cases with a ten percent mortality and Hastings Tweedy's⁴ eighty-three cases of eclampsia treated

conservatively at the Rotunda Hospital with a seven percent mortality. On the average, then, three times as many eclamptics die following Cesarean section as do following conservative treatment.

The more one sees of eclampsia, the better he realizes the wisdom of conservatism. Such a realization by the profession in general will make Cesarean section more nearly a last resort in eclampsia instead of the primarily elected act of therapy. This will decrease Cesarean section mortality.

A second means of lowering Cesarean section mortality depends on the physician who conducts the trial labor. If this man does a vaginal examination without proper technique, he has decreased his patient's chance of recovery just so much.

If accurate pelvimetry and fetometry have been done, we should be able to say *before the onset of labor* which women are potential candidates for Cesarean section. Such women should be protected from contamination in every possible way during trial labor. Asepsis should be rigid, vaginal examination supplemented by rectal examination whenever possible; and in absence of engagement of the head, operative delivery from below should be attempted only if success seems certain. In the writer's experience, rectal examination will not always give the desired information, a fully dilated cervix being difficult in differentiation from one with no dilatation at all. Even so, trial labor can be conducted intelligently if rectal examination be supplemented by one careful vaginal examination when in doubt, or when desiring to make a final decision as to method of delivery. Such a routine is in marked contrast to the women we often see sent in for Cesarean section having already been vaginalized many times, sometimes even without pubic preparation. Cesarean section in such cases is a hazardous undertaking, especially if the classical type of operation be chosen.

Another picture that we see is the woman brought into the hospital for operation after too long a delay. Exhaustion, acidosis and beginning shock are already present. Cesarean section carries a big risk for such a woman. What is an adequate test of labor? This varies with each patient. But certainly accurate knowledge as to the character of the pelvis, size of the baby, the position and presentation and character of her uterine contractions will help answer the question. Intelligent observation of progress or lack of progress of the presenting part is also necessary.

If, in the presence of good contractions and a normal position and presentation, no progress is made in cervical dilatation and advancement of the presenting part, we should begin to look for the cause, instead of being blindly hopeful that such a woman will in time deliver. The author is not advocating routine Cesarean section in all such doubtful cases. Many times morphine or rectal

analgesia will produce a needed respite of a few hours which changes the picture from operative to normal. However, operative risk is increased by delay in recognizing the woman's inability to deliver herself until she is exhausted or approaching the state of shock.

Proper pre-operative preparation of the Cesarean patient is important. Intravenous injection of 500 c.c. of ten percent glucose solution is indicated in most cases where the patient has had a long labor, because dehydration and acidosis are present usually in some degree in such cases. Marked anemia from placenta previa or premature separation of the placenta should be corrected by transfusion before hysterotomy is done, because the operative blood loss, even though small, may otherwise prove fatal.

Intravaginal instillation of thirty c.c. of four percent mercurochrome should be a pre-Cesarean section routine in cases of potential infection. Although the only possible control by which to check this treatment is reflection on past cases not so treated, the author believes this practice rational.

Details of the technique of classical section are well known. However, a few points are of sufficient importance to justify mentioning in this type of discussion.

1. Speed is not essential, but reasonable rapidity is desirable. Most Cesarean section patients already have expended energy and strength in the labor preceding the operation. A too lengthy anesthetic under such conditions is bad. A well-organized surgical team is essential if time be conserved.

2. Gauze packs usually can be dispensed with. Most men feel them contraindicated because of the resulting peritoneal trauma. If the second assistant will apply pressure laterally on either side of the abdomen while the uterus is incised, spill will be minimal. If during the uterine closure, the uterus is held up into the abdominal incision by tenacula or pins, or by a suture at either end of the uterine incision, gauze packing will be unnecessary. A satisfactory anesthetic is presupposed.

3. Most important of all technical details is that of closure of the uterine incision. Sutures must be placed so as to control hemorrhage, close all dead space and give a water tight closure.

Losee stresses the importance of avoiding the infolding of endometrium in the line of suture. In his opinion such infolding of uterine mucosa is one cause of faulty union and future rupture of the uterus. For this reason the first row of sutures should go down to the uterine mucosa but not include it. This first row is a continuous suture; the second row may either be continuous or interrupted—the author using interrupted sutures. If interrupted, a good rule is to place the sutures one centimeter apart and emerging not more than

one-half centimeter laterally—the latter in order to make the third suture easier to place. This third suture is a continuous Lembert, peritonealizing the entire uterine wound. If interrupted sutures are used, care should be taken that just the proper tension is present in order to prevent strangulation of the included uterine muscle.

All of these points will help reduce Cesarean section mortality. But the most important single factor is the type of operation chosen for the individual patient. Too often the decision to do a Cesarean section automatically means classical Cesarean section. This is now obsolete. All candidates for Cesarean section can be divided into three classes.

The first class is that of the clean case, the elective case, not in labor and with membranes intact, or the case in labor a short time with no vaginal examinations, or with one single examination done under scrupulous technique. Only on such patients should the classical technique be used, if we expect to maintain a low rate of maternal mortality. We, of course, except placenta previa from such a rule, any type of cervical operation being contraindicated because of increased vascularity of the lower uterine segment.

The second and largest class is that of the potentially infected patient, one who has had a test of labor of any length with or without vaginal examinations.

Harris and Brown⁵ have shown by intrauterine cultures at Cesarean section the presence of pathogenic organisms in the uteri of women in labor six hours or more regardless of rupture of the membranes. Clinical experience, although not so exact as to time, adds credence to this conclusion in that the morbidity and mortality of classical Cesarean section increases in direct proportion to the duration of labor preceding the operation.

To quote Montgomery⁶: "Early or elective Cesarean section has a low mortality, two to three percent. Late Cesarean section of the classical type has a high mortality, twenty to thirty percent."

With this in mind, if the classical technique were still the only Cesarean technique, two results would follow:

First, we would not be justified in giving our borderline cases a test of labor. This would result in needless Cesarean sections. Second, those women seen for the first time late in labor and still needing abdominal delivery would have to face a twenty-to-thirty percent mortality.

Fortunately we need not do the classical operation on such potentially infected women.

The Beck modification of the Kronig operation, usually called the low two-flap Cesarean section, is the operation of choice in such cases. The importance of this operation is not evident until we realize that most candidates for Cesarean section fall into the class of potential infection. What are

the advantages of the Beck operation? Most important is the prevention of peritonitis.

It is conceded that primary spill of uterine contents is not the main cause of peritonitis. Uterine contractions occur following Cesarean section just as they do following normal delivery. If as a result of involution or loosening of a suture the integrity of the uterine closure be lost, lochia can then be squeezed out through the suture line. Thus the peritoneum will be contaminated by a rich culture of pathogenic organisms. This cannot happen following the two-flap operation because the suture line in the uterus is sealed off by two layers of visceral peritoneum.

Another advantage is that the uterine incision is in the non-contractile lower uterine segment instead of the contractile fundus as in the classical section. It follows that uterine wound healing is more certain in the low operation.

Further advantages of this technique can be demonstrated best by a brief summary of the salient features in eleven consecutive low two-flap Cesarean sections all done on potentially infected patients without a death. The writer still does the classical operation on clean cases. Therefore, these eleven cases all represent women for whom the classical technique was considered dangerous. Not only were there no deaths but there were no cases of sepsis or wound infection. The highest post-operative temperature in one was 100.8 degrees, in a second patient 100.6 degrees, a third 100.5 degrees, two others 100.2 degrees and one 99.8 degrees Fahrenheit. It is to be remembered that these were in women for whom the classical technique would have put them in Montgomery's twenty-to-thirty percent maternal mortality group. There were no stillbirths or neonatal infant deaths.

The characteristic post-Cesarean abdominal distention was absent in all of these patients. They were all decidedly more comfortable than is usually the case after the classical technique even in clean cases.

Regarding indications for operation, nine of the eleven had contracted pelves, one had cervical dystocia, and one had had a former Latzko extraperitoneal Cesarean section. Excluding one case not in labor and two cases with indefinite histories, the duration of labor prior to operation varied from twelve to forty-eight hours, the average being twenty-five hours.

Brief recitation of the details of one of these cases will illustrate the type of obstetrical situation in which the Beck operation is indicated.

Mrs. M. B., age twenty-two, Para IV, generally contracted pelvis. History of first two labors being terminated by internal podalic version, indications being non-engagement of head after test labor. Stillbirths resulted in both instances as a result of difficulty with the after-coming head. This third pregnancy did not continue to term. Present pregnancy: After forty-eight hours of

active labor in the home, the head was still unengaged. A low two-flap Cesarean section was done and a living infant delivered. Recovery was uneventful, the abdomen remained flat, there was little complaint of pain, and the highest temperature after operation was 100.5 degrees Fahrenheit.

The post-Cesarean histories of the remaining ten patients were so similar as to make detailed description monotonous.

Mortality statistics in Indianapolis and elsewhere indicate that such results are not obtainable in this class of potential infection if one uses the classical technique.

In a critical discussion of the low two-flap operation we admit that more time is required than for the classical technique. We must also consider the claim that there is more hemorrhage than with the classical Cesarean section. This has not been my experience. Hemorrhage can be limited, if in the dissection of the peritoneal flaps blunt instead of sharp dissection is used, and if the dissection is not carried too deep. Injections of pituitrin and gynergin are given exactly as usual.

Some difficulty in flap dissection is experienced if the low technique is attempted prior to labor. The new double incision technique of Beck may have remedied this difficulty. There is not a serious disadvantage, however, as the classical technique is safe before the onset of labor.

The low operation would seem to be contraindicated in placenta previa because of increased vascularity of the lower uterine segment.

Such limitations are of little importance in view of the many advantages of the low two-flap operation, the principal two being its safety in cases of potential infection and the smooth postoperative course.

The third class is that of the frankly infected case, the woman who has been in labor for days or on whom repeated forceps attempts have been made, and whose undelivered infant is still living. DeLee still believes that craniotomy on the living baby may be the method of choice in extreme cases of this type. One not wishing to follow such teaching must resort to the Porro operation or some type of extraperitoneal Cesarean. The Latzko technique seems to be the best of these.

The necessity for such radical procedures fortunately is decreasing each year as obstetrical teaching and practice improve. There is no reason why we should allow our own cases to get in such condition that we cannot do the low two-flap Cesarean with safety.

Summary:

1. Maternal mortality following Cesarean section in four Indianapolis hospitals for the year ending November 1, 1928, was 11.3 percent. The individual hospital rates were 0.0, 3.8, 13.3 and 17.2 percent.

2. Fetal death rates following Cesarean section varied from 0.0 to 13.3 percent, the average being 8.7 percent.

3. Cesarean section incidence varied among hospitals from 1 in 29 to 1 in 15.4, the average being 1 in 19.

4. The maternal mortality rate of 11.3 percent is not high if compared with the 13 percent mortality in Detroit³ during the year 1926, or the 16.1 percent maternal mortality in New Orleans⁶ from 1921 to 1926. When compared with Newell's⁷ 2 to 4 percent, Williams'⁷ 5½ percent, and the Chicago Lying-in Hospital's⁸ remarkable series of 731 low two-flap operations with a maternal mortality of 1.2 percent, the Indianapolis rate of 11.3 percent is much too high.

5. Of the twelve maternal deaths during the year, ten of these followed classical Cesarean section.

6. Eleven low two-flap Cesarean sections are reported. These were done on potentially infected women for whom the classical type of operation would have been unsafe. There were no fetal or maternal deaths, no sepsis or wound infection.

Conclusions:

1. Statistics corroborate the widespread clinical opinion that the low two-flap Cesarean section is the operation of choice in cases of potential infection.

2. Study of Cesarean section results as reflected by mortality statistics indicates the need of better application of present day obstetrical knowledge as to the indications, contraindications and limitations of the various types of Cesarean section.

CLASSIFICATION AS TO INDICATION FOR OPERATION					
Indication	Number of Cases	Maternal Deaths	Maternal Mortality	Infant Deaths	Infant Mortality
Contracted pelvis.....	32	5	15.6%	2	6.2%
Eclampsia	6	2	33.5%	1	16.6%
Previous Section.....	9	0	-----	1	11.1%
Breech	4	1	25.0%	0	-----
Disproportion	10	1	10.0%	0	-----
Placenta Praevia.....	11	2	18.1%	3	27.2%
Uterine Inertia.....	7	0	-----	0	-----
Unclassified	10	1	10.0%	0	-----
Elderly Primipara....	5	0	-----	0	-----
Breech and Former 3-inch Laceration..	1	0	-----	0	-----
Diabetes and Acute Nephritis....	1	1	100.0%	0	-----
Face	1	0	-----	0	-----
Transverse	2	0	-----	0	-----
Ovarian cyst.....	1	0	-----	0	-----
Vaginal varicosities ..	1	0	-----	0	-----
Uterine suspension ..	1	0	-----	0	-----
Uremia	1	0	-----	0	-----
Cervical dystocia.....	1	0	-----	0	-----
Twins and Polyhydramnios	1	0	-----	0	-----

SUMMARY OF THE ELEVEN LOW TWO-FLAP CESAREAN SECTIONS AS REPORTED

Name	Para	Indications	Membranes	Hours in Labor	Highest Temperature
Former Latzko,		M.R. II	Ruptured	Not recorded	101.8°
		Cesarean Section, Contracted pelvis,			
E.M.	I	Contracted pelvis,	Intact	24½	101.6°
M.D.	I	Contracted pelvis, Non-engagement of head after 25 hours labor, fetal distress large baby, 4250 gms.	Intact	25	103.8°
R.V.	IV	Generally contracted pelvis and former Cesarean Section,	Intact	Not recorded	100.8°

B.C.	I	Contracted pelvis,	Intact	32½	103.4°
E.C.	I	Contracted pelvis,	Intact	29	102.0°
H.W.	I	Contracted pelvis,	Ruptured	Not in Labor	99.8°
J.S.	I	Contracted pelvis,	Ruptured	12	100.2°
E.W.	I	Cervical dystocia,	Intact	18	100.2°
H.G.	I	Contracted pelvis,	Intact	12	100.6°
M.B.	IV	Contracted pelvis,	Intact	48	100.5°

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THROMBOPHLEBITIS OF THE CAVERNOUS SINUS*
(WITH CASE REPORTS)

D. H. RICHARDS, M.D.
VINCENNES

The comparative infrequency of cavernous sinus thrombosis with its almost uniformly fatal results, the importance of peripheral infections on deeper structures, and the general tendency of both the laity and the profession to lay small stress on seemingly trivial matters which constitute the source of these infections, when they could be controlled so easily if treated at the right time, has prompted me in presenting this paper before the Academy.

In order to understand more clearly how infection of a hair follicle may result in cavernous sinus thrombosis, it is necessary to review the relationship of the return circulation of the nose to the cavernous sinus. The veins of the walls of the nasal cavity end partly in the ethmoid tributaries of the superior coronary and partly in the lateral nasal veins, both of which are tributaries of the facial veins; but the majority of the veins of the nose, both from the septal and outer walls, join together to form the sphenopalatine vein which passes through the sphenopalatine foramen and the sphenomaxillary fossa and terminates in the pterygoid plexus. This plexus communicates superiorly with the cavernous sinus through the foramen ovale, or the foramen of Vesalius when present. The ophthalmic vein, which receives blood from part of the nasal veins, terminates in the anterior end of the cavernous sinus, passing through the sphenoidal fissure.

Thus it is seen that there are two chances of an infection around the root of a hair in the aperture of the nose being carried into the cavernous sinus. Cavernous sinus thrombosis may occur from many other sources, such as those cases which depend upon debilitating conditions, or in old age

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the so-called marasmic types, and which nearly always follow an involvement of the longitudinal or lateral sinus, those which are due to injury, such as fracture of the skull, or operations in the neighborhood of the gasserian ganglion; and those which are due to infections.

The thrombotic process may be septic, a true thrombophlebitis which is the most common form, or aseptic in which a purulent condition is absent. One or both sinuses may be involved, the bilateral process being a frequent one. Because of the elaborate venous connections of the cavernous sinus, there are many areas which, if they contain foci of infection, may send septic products to the sinus and determine a thrombophlebitis. Thus the infection may proceed from scalp wounds; from the neck as a result of a carbuncle; from the eyelids as a result of furuncles, styas and pustules; from pimples, infected wounds and erysipelas of the face; from ulceration of the nasal mucosa; from the paranasal sinuses, especially the sphenoidal and ethmoidal; from periapical abscesses and carious teeth; from septic tonsils; from suppurative otitis media and mastoiditis, and from cellulitis, abscess and periostitis of the orbit.

From such varied sources as all of these there surely must be many more cases than are reported in the literature. Dwight and Germain in 1902 reported 178 cases and were the first with Hartley to attack the sinus surgically. Smith in 1918 estimated that less than 300 cases had been recorded. Chisholm and Watkins found but eight cases in 50,000 surgical records of the Johns Hopkins Hospital. A prominent brain surgeon of Boston wrote me some time ago that although such cases may be common in the Eye and Ear Infirmary, the only case that he could recall in all his experience was a traumatic case that occurred from an injury while packing the cavernous sinus in the course of a gasserian ganglion operation done almost thirty years ago at the Johns Hopkins Hospital. Dr. Wells P. Eagleton in his recent book on "Cavernous Sinus Thrombophlebitis" reports twenty-five personally observed cases with twenty-one deaths and four recoveries. I have seen four cases in the last four years, two from ethmoidal and sphenoidal sinus infection, and two cases from furuncles of the nose, all of which died.

One reason why so few cases are reported, in my opinion, is that the old classical symptoms of exophthalmos, œdema of the lids, and chemosis may or may not be present, and then there are many cases that are never diagnosed because no post-mortem examinations have been held.

In regard to the treatment of cavernous sinus thrombophlebitis, I believe it is the consensus of opinion that the only cure is through surgical interference and that only when the diagnosis has been made at the earliest moment. At the present time this consists in placing the inflamed venous radicle at rest by ligating the common or internal

carotid artery, thus stopping the ebb and flow movements of the blood, which cause a retrograde thrombophlebitis which is brought about by the veins in this region having few valves; and drainage of the cavernous sinus through surgical procedure by way of the floor of the middle fossa.

Eagleton suggests also that good may sometimes be accomplished by treating the condition by serotherapy and vaccinotherapy, using mercurochrome—220, gentian violet or acriflavin.

From all this it appears that the original infection need not seem to be a serious one, and the trivial way in which such infections are regarded by the laity and the profession alike partly accounts for the wide prevalence of the disease. It is insidious and fastens on one with a slow, disastrous effect before the doctor or the patient is aware of its seriousness; and when they do wake up it is too late to do anything about it. A patient comes to the physician with a sore in the nose and is told that it is nothing but a pimple at the root of a hair which will not amount to anything and will disappear in a few days without any treatment. Armed with this assurance the patient goes home and proceeds to pick the top off the furuncle with unclean nails or with some instrument that has not been sterilized. Here, no doubt, a new element is introduced which may show a predilection for the venous circulation, or perhaps the streptococcal or staphylococcal infection of the pimple is forced or squeezed into the adjoining tissues or into the blood stream and the vicious process is started on its way to the cavernous sinus.

The lymphatics guarding the vestibule of the nose are situated under the mandible and being so far away from the source of the conflict and having such a devious and roundabout way of marshaling the leukocytes into action they are unable adequately to cope with the situation, and the infecting organisms run pell mell past the guards and float away in the venous blood streams until they settle down in quietude in the cavernous sinus. Another reason why it is so easy for infection in this neighborhood to gain such an easy entrance into the sinus is that the veins of the nose are valveless, thus furnishing an unobstructed passage.

Other factors are the superficial situation of the veins, with nothing to keep them from distending, and the short distance the infection has to travel before it enters the danger area. Then the cavernous sinus acting as a lake where the blood stream is retarded or stagnated gives the infecting organism a chance for easy lodgment. However, this stagnation may be a blessing in disguise, a wise provision of nature to dam off the infective organism, and prevent metastatic infection in other parts of the body. But since nearly every case of cavernous sinus thrombophlebitis proves

fatal, there is not much to choose between confining the poison in the base of the brain and a quick demise, or a slower death from metastatic abscess and general infection.

I want to report two cases of cavernous sinus thrombophlebitis I have seen that have resulted from a pimple at the root of a hair in the vestibule of the nose. The first patient was a barber who came to me complaining of a sore in the nose which was causing him a severe headache, as well as pain at the site of the disease. I located a small circumscribed furuncle at the root of a hair just within the nose near the septum. I sterilized the area with iodine, opened the furuncle widely and filled the cavity with iodine. The next day the patient returned complaining more of the soreness in the nose and of a more intense headache than he had had the day before; the headache seemed to be in the base of the skull or as he expressed it, back and above the roof of the mouth. I examined the seat of the infection and found it open and draining. I again filled it with iodine and sent him home and to bed.

I did not see the patient for two days, when his family physician, Dr. C. E. Stewart, called me in consultation. The man was in a drowsy, semi-comatose condition with a low grade of mumbling delirium and a temperature of 105. His left eye was protruding and fixed and there was profuse conjunctival chemosis, the lids could not be closed over the globe. The central vein of the retina was strutted with black blood, and there was a marked choked disk. At the base of the nose between the brows was an abscess an inch across. The next day the right eye was involved with conjunctival chemosis, exophthalmos, fixation and so forth; the delirium had ceased, but the patient was still in a comatose condition from which he never recovered. He died the next day, which was the seventh day from the time I first saw him.

The second case occurred in November, 1927. My nephew, age thirty-three years, a farmer living at Edinburg, was sent to the Methodist Hospital in Indianapolis and Dr. E. L. Lingeman saw him only a few hours before he died. I did not personally see the case until after death; the details were furnished me by his wife and Dr. J. V. Baker of Edinburg and by Dr. Lingeman. This young man contracted an infection in the nose, but did not think it of much importance. He tried to extract the hair around which the pimple seemed localized; he finally picked the top off it and tried to squeeze the contents out.

The infection did not seem to give him much trouble for a day or two; then he went hunting and got his feet wet. The next day he went to the field and tried to husk corn, but began to feel so badly and had such a severe headache that he had to give it up; he went home and to bed. From this time on he grew worse and in two days consented to have Dr. Baker come to see him. Dr.

Baker thought he had frontal sinusitis and prescribed for him. By the next day the eyes began to protrude, he was in intense pain and had a high temperature with rigors and profuse perspiration. He rapidly merged into a comatose condition with a temperature of 106 and was taken to the hospital. He died on about the seventh day from the onset of the infection.

The fatal termination of both of these cases leads me to the conclusion that the laity places too low an estimate on the seriousness of wounds and infections around the face and head.

Too frequently such a thing as a small pimple at the root of a hair is regarded as a trivial affair and is passed off too lightly. Every physician should impress upon his patients the importance of making such infections sterile by the liberal use of iodine or other antiseptics as are necessary to clear the seat of the trouble of any danger, and not wait until surgical treatment is contemplated, for then it is practically always too late. Such things follow the same laws as the loosening of a small stone at the top of the mountain which results in an avalanche that may destroy a whole town before it reaches the bottom. We should prevent the stone from starting in the first place.

If this paper shall start any discussion that may lead to the better equipment of physicians in preventing this disease, or be the means of saving one life from its devastating effects, I shall feel myself amply compensated for my labors.

DISCUSSION

E. L. LINGEMAN, M.D. (Indianapolis): I am very much interested in Dr. Richards's paper, for the reason that I have seen two or three of these cases in the last few years. He has presented a condition which, starting as it does with an innocent, trivial infection around the angle of the nose and upper lip, progresses many times to one of the most serious and fatal conditions that we have to deal with as otolaryngologists. Many of these cases, practically all that I have seen, have been strong, robust persons, who give a history of having had a little furuncle in the nose around the hair follicles, and there is also a history of mistreatment, perhaps by the doctor, but usually by the patient. He thinks it ought to be opened up, he tries to get the hairs out and then evacuate the pus by squeezing, the very thing he should not do. It is not long until he begins to have fever and malaise, then exophthalmos and oedema of the upper lid, a somewhat extensive proptosis of the eye on that side, the temperature going higher and higher until it reaches 106, usually; then, of course, the symptoms of post-meningitis, and death.

The case of Dr. Richards' nephew that he mentioned, I saw a year ago last November, and there is no need to describe it in further detail. The young man was moribund when I saw him. He had had the infection five or six days. There was

extreme proptosis of the left eye with fixation, and there was beginning exophthalmos of the right eye. His temperature was 105 degrees, and it went to 106 degrees before he died, which was six hours after I first saw him.

There is nothing more tragic and hopeless than the picture which presents itself in these cases after the infection has left the angle of the nose and upper lip and has entered the cranial cavity. There is nothing we can do. Only four cases out of twenty-five are relieved and cured by surgical intervention. The location of the cavernous sinus makes it almost always unsuccessful, so I doubt whether we will be using surgery ourselves for some time to get at this situation. On the other hand, these cases are one hundred percent fatal as it is, and there is no reason why an experienced surgeon who knows the anatomy of the middle fossa of the brain and the cavernous sinus should not be successful. Of course, it is the deep location that makes it more serious, but if a few cases can be saved it will be worth while, and I prophesy that eventually we will have an operation that will be done rather regularly.

Another case I wish to report is one in which the barber gets the blame. It was a young man who had gone to his barber for some work, and in the course of his treatment he asked to have a few nasal hairs snipped off, which was done, and in doing it the skin was nipped about the mucocutaneous margin. It was not considered serious until he began to have a swelling of the nose which extended up one side. There was œdema of the eyelid and a little exophthalmos; he had an intense headache that simulated frontal sinusitis, and he had fever which climbed higher and higher until he died. He also had symptoms of postmeningitis, and as most of them do, he went out on the seventh or eighth day—all due to a little scratch of the skin inside the nostril.

The important point in Dr. Richards' paper as I see it is that we should broadcast to the laity and to the general practitioners the importance of this so-called dangerous area roughly comprised of the nostril, the septum, the upper lip, and adjacent parts of the face. He has explained the anatomical reason for the danger, and mistreatment or mishandling will convert an innocent infection into a very serious situation. I agree with the doctor that there must be some of these cases that are unreported and unrecognized, but surely there are enough reported to emphasize the danger of infection in this part of the face.

The doctor dwelt somewhat upon the early treatment of this condition. Our hope, of course, is in prevention, not cure. If we wish to save life we must save it before the infection gets into the cavernous sinus. The fact that the condition is regarded as trivial causes it to be mistreated more than anything else we have to deal with. We are apt to incise a little furuncle before it is localized,

before nature has set up a barrier, and this in itself may tend to throw the infection into the venous channels. So as I see it the important thing is to emphasize, both to the laity and to the general practitioner, that there is a so-called dangerous area that must have our respect.

J. C. DANIEL, M.D. (Indianapolis): We heard this morning the paper by Dr. MacDonald in which he showed the value of the judgment of the ophthalmologist in the treatment of certain general conditions, but here is one in which the ophthalmologist is of no value whatsoever to the otolaryngologist, because the first sign of thrombosis of the cavernous sinus from the eye standpoint is too late—other than to show that it is a cavernous sinus thrombosis.

I wonder, in the cases that have been reported here, what has been done toward showing what organism it was, and what specific affinity the organism had towards the thrombus. In many conditions where we have a specific organism there is a tendency to a specific reaction. Has that ever been tried and shown in cavernous sinus thrombosis?

After the thrombus has set in there is nothing we can do. All we can do is to try to save the four out of twenty-five cases. I would like to hear some discussion of the type of organism.

O. G. BRUBAKER, M.D. (North Manchester): I have not had a case of cavernous sinus thrombophlebitis, but it occurs to me that in case of these little furuncles about the nose, in this danger zone, the best thing to do is to forget that we know anything about surgery for the time being.

Not long ago I had a medical student who came home with a badly infected upper lip—it was full of little pustules. Naturally, my inclination was to make a good free incision, but I had the good sense to stay away from it. I used antiseptics, hot applications, diathermy and light treatment, and he recovered and went back to school. I do not know whether that would have developed into a case of cavernous sinus thrombosis if I had used surgery, but it might have.

Another case occurred in the last month, a man about sixty years of age with a badly infected lip extending up into the nares, which he said was started by pulling out a hair. Again I was tempted to give it free incision, but I did not. A man in town happened to have a quartz lamp, so I painted the lip with iodine and turned the patient over to him for daily treatments, and he recovered. The point is this: Do everything you can to keep the infection from getting into the cavernous sinus zone, and I believe one step is to treat these cases medically rather than surgically.

B. D. RAVDIN, M.D. (Evansville): In looking over the literature for the preparation of my paper on styas, I ran across a paper by Dr. J. William Hinton, published in the *Annals of Surgery*, 1927, on the dangers of infections in the nose, and in

that article he makes the statement that infections of the nostrils are not due to medical procrastination, but to over-zealous surgical intervention. That has already been emphasized.

There is nothing I have so much respect for as a pimple in the nose, and I never open them. I recall a case that I saw in which a very zealous and enthusiastic general surgeon opened a pimple in the nose and caused a cavernous sinus thrombosis in a woman who originally had a tooth extracted, and following the extraction developed a pimple on her cheek which was opened by the usual method of squeezing it. She subsequently developed a furuncle in the nose, and on consulting the general surgeon he very boldly incised it before it was ready. Within a few days she had all the classical symptoms of cavernous sinus thrombosis. My father was called in consultation and thought she was developing an orbital cellulitis and urged the necessity of puncturing the lip in order to evacuate the abscess, but he was assured that there was no abscess, and she developed a cavernous sinus thrombosis, of which she promptly died.

Dr. Richards has told us how easy it is to develop these infections on account of the condition of the nasal veins, these veins having no valves. The traumatizing of a vein that has a thrombus is very apt to produce a cavernous sinus thrombophlebitis, and we as rhinologists should do more in the way of propaganda, urging the general practitioners and surgeons as well as the laity to keep their hands off these pimples or boils in the nose. And I certainly think it would be better to resort to some such treatment as Dr. Brubaker has mentioned than to take the slightest chance of the subsequent development of cavernous sinus thrombophlebitis.

H. W. EBY, M.D. (Goshen) My experience with these cases has been limited. I have come in contact with only one case, one in which I was called in consultation in an adjoining city. Of course, the doctor wanted to support himself because the case was typical and there was no difficulty in diagnosis. The patient died, as they always do.

It seems to me the helpful part of the Doctor's paper is the stress he lays on the importance of preventing surgical interference. I think there are, and always will be, doctors who want to open every kind of infection, and I think it is our duty to educate the people to the importance of this condition. On the other hand, I realize that only a very small percentage of these cases go to the doctor. I doubt whether the doctor gets one case out of twenty, so it is difficult to educate the public, but I think it is our duty to do what we can to stress this matter and perhaps save a few cases in the future.

ARCHIE D. EREHART, M.D. (Anderson): I have only seen one case of cavernous sinus throm-

bosis, but it seemed to be of a little different origin from those mentioned here because it came from sinus infection. It was a case of erysipelas which developed a pansinusitis. The patient had been seen by two family physicians and a specialist, and I was called in when the specialist was out of town, which was about the seventh or eighth day. At that time the patient had developed a typical cavernous sinus thrombophlebitis, with the exophthalmos, oedema and all that. He gave a history of sinusitis before the erysipelas came on, and I do not know whether the erysipelas was the only cause or not. I bring this case up to show that the condition may come from sinusitis and not from infection of hair follicles.

C. A. ROBISON, M.D. (Frankfort): I would like to report four cases. First, a baby of ten months that I saw in a clinic in Chicago. A diagnosis of sinus thrombosis was made, the right eye was proptosed and there was a little oedema. The only source of infection was around a tooth which the baby was cutting. The organism, however, was not isolated, and the kind of infection was not determined.

The second case I saw in consultation in the spring of 1927, a boy ten years old, who worked on a farm. He had a pimple at the angle of the nose with the cheek, and when he rested his horses after going around a field he would squeeze this pimple. The doctor treated the case for erysipelas, and when I was called he had all the typical symptoms of cavernous sinus thrombosis, and died in about forty-eight hours.

The third case I saw in consultation about six weeks after that, a woman about thirty-five years of age who had three or four so-called fever blisters on her lips and one or two pimples just below the nose. A very conservative doctor treated the case, using bichloride packs, but she died in two or three days after I saw her.

The fourth case I saw in consultation in June of this year. It was a baby eighteen months old. It was sent to one of the clinics and a brain tumor was diagnosed. The child was sent home and about three days after that I saw the case and made a diagnosis of cavernous sinus thrombosis, which was confirmed at autopsy.

We could do nothing for these four cases. This paper was very interesting, but I would like to know more about the organism involved.

B. B. GRIFFITH, M.D. (Vincennes): I have seen cavernous sinus thrombosis in chronic purulent otitis media. This was a woman fifty years of age that I was called to see in consultation and found a typical case of sinus thrombosis—proptosis of the eye, temperature—all the symptoms of sepsis. However, I did not get up to discuss that case or to make a report as it is the only case of cavernous sinus thrombosis I have seen following otitis media. But I believe that we as otologists should impress upon the public and the

general physicians the importance of not interfering with these things. Until they are walled off I do not think anything should be done; let them alone. We used to open furuncles in the ear, but we do not do that any more, and we get better results. I only wish to emphasize strongly the idea of letting these cases alone and not using surgery.

ALFRED F. CLEMENTS, M.D. (Evansville): I had the opportunity to see a case while visiting a clinic in St. Louis, a young man who came in with an infection at the corner of his lip that involved the alae of the nose. They took a small catheter and plunged it into the side of the nose below the inner canthus, the idea being of course to shut off circulation above the brain and divert it down. The patient did not develop cavernous sinus thrombosis.

J. W. CARMACK, M.D. (Indianapolis): I have only seen two of these cases and the only reason I make a report is because the question of the infecting organism has been raised. One of these cases was due apparently to a furuncle in the nose; the other case came up in the course of an acute suppurative maxillary sinusitis. There is always a great deal of infection of the nose in these cases, and possibly some muco-cutaneous infection along with it. But the other case was posted, and the postmortem of a case that has died of cavernous sinus thrombosis is extremely discouraging so far as the outlook for cure by surgical intervention is concerned. This case had a hemolytic streptococcus infection of the sinuses. That was five years ago.

It seems to me that the important thing has been stressed by every man this morning—that there should be more papers written for general societies emphasizing the dangers, and also emphasizing the fact that these cases should be treated medically. Personally I use some sort of unguentene poultice, something that will help this abscess to become localized and drain without incising it.

The surgical side of the cure of cavernous sinus thrombosis, after it occurs, has been touched upon by Dr. Lingeman, but it seems to me that before any great thing can be accomplished in the surgical treatment we must know more about the treatment and cure of meningitis, because we do not have cavernous sinus thrombosis long without meningitis, and our efforts in that direction surgically have met with poor results. Until we know more about that we will not accomplish much because as soon as we go in to open the cavernous sinus in any direction we are bound to infect a field that we cannot handle—that we have not been able to handle in the past. When we learn more about the treatment of meningitis and its cure we will be in position to do something for cavernous sinus thrombophlebitis surgically.

A. E. BULSON, M.D. (Fort Wayne): I want to call attention to one phase of this subject and that

is the possible sterilization of the blood in these cases. I heard Dr. Eagleton speak of this one time when discussing the question of purulent inflammations of the brain, particularly those connected with sinus thrombosis as a complication of mastoiditis. I have seen eight or ten cases in the last thirty-five years. In one case the lateral sinus was opened and drained, a meningitis developed, and realizing that a fatal issue would ensue unless something radical was done, I decided to inject into the patient's vein a large dose of mercurochrome. It has been advocated that forty cc. can be injected into a vein, but I was cautious and put in thirty cc. The patient had a violent chill followed by a rise of temperature, but he is well today. Incidentally, there was a lot of vomiting and purging connected with the reaction.

I have introduced mercurochrome in two other cases with apparently satisfactory results, but in two other cases the patients died. There has been a great deal of objection to the introduction of so-called sterilizing agents into the blood stream, but it seems to me we are justified in using almost anything in these cases that seemingly are hopeless in almost every instance.

D. H. RICHARDS, M.D. (closing): I have not much more to say. I believe that the trend of medical teaching today is a little different from what it was when I attended medical college. There was an old saying, as old as Hippocrates himself, *ubi pus ibi evacua* ("Where there is pus, let it out.") But since I have come in contact with these few cases that I have seen, and which I approach with fear and trembling, I have wondered whether my surgical interference in the first case was responsible for the results that supervened.

I tried to stress in the paper that the important thing in these cases is to let them alone.

DISLOCATION OF HIP WITH FRACTURE OF POSTERIOR RIM OF ACETABULUM

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Fracture of the posterior rim of the acetabulum complicating dislocation of the hip has received little notice in the literature. Gatewood¹ reported a case in which the roentgenogram showed a fragment from the rim of the acetabulum overlying the head of the femur. This fragment could not be seen after reduction. It evidently was attached to the capsule and was replaced when the dislocation was reduced. Plaster was applied and six weeks after the accident the patient was walking with perfect function. Wheeler² saw a case of dorsal dislocation in which, owing to fracture of the posterior rim, the head slipped out of place after

several reductions. The reduction was subsequently made by direct extension and swinging movements, and maintained in position by fixed extension in a Thomas splint. Koven³ reported a case in which roentgenograms showed multiple fracture of the upper, posterior and inferior portions of the rim; nearly three-fourths of the rim was broken off and the head of the femur luxated posteriorly. The reduction was accomplished by the Bigelow maneuver and the extremity placed in abduction in a plaster spica for four weeks. Two weeks after removal of the plaster the x-ray showed a normal hip. Treatment with passive motion and massage was given and the patient allowed to stand on the twelfth week. Four months after injury there was no restriction of joint movement and no shortening of the limb.



Fig. 1

Fig. 1. X-ray tracing before reduction of dislocation, showing large fragment from posterior rim of acetabulum displaced and rotated outward and upward.

Breton and Blondeau⁴ report two cases in which the injury was produced by the patient being thrown violently forward in an automobile when it ran against a tree. The diagnosis of dislocation of the hip was easily made, but after the reduction it was found in one case that the hip could easily be dislocated again. In both cases the roentgenogram showed a fracture of the posterior rim of the acetabulum; in both a splinter of bone was shown at the upper portion of the rim. The authors state that the patient should be placed in a plaster cast, as the dislocation of the femur is liable to recur. One of their patients was not seen after reduction of the dislocation. The other was seen a year and a half after the accident. He

walked normally but showed a slight diminution in the extent of abduction of the hip, possibly due to the callus of the acetabular rim. He also complained of some pain in the thigh and leg which may have been due to pressure of the callus on the sciatic nerve.

Stoccada⁵ treated a case in which the diagnosis was not made until several days after the injury, despite careful and painstaking clinical observation. X-ray showed incomplete iliac dislocation with fracture of the upper portion of the rim. The dislocation was reduced and the limb fixed in plaster in extension and abduction. Convalescence was complicated by traumatic osteo-arthritis, but function was almost normal. Eisendrath⁶ states that many fractures involving the posterior rim are treated as contusions or incomplete dislocations of the head of the femur. He advises Buck's extension for four weeks after reduction. Rose and Carless⁷ say that the posterior rim of the acetabulum may be broken off by the head of the femur, which is dislocated backward by the same accident. Reduction is affected easily and with crepitus, but the dislocation usually recurs and requires prolonged and effective traction in abduction.

CASE REPORT

R. G., aged thirty, a well developed and muscular railway fireman, was admitted September 5, 1928, at 9 P. M., a few hours after the automobile in which he was riding struck a concrete culvert. He was irrational and in shock, suffering from cerebral concussion, extensive lacerations of the face, scalp and left knee, a typical dorsal dislocation of the left hip, Pott's fracture of the right ankle and multiple contusions and abrasions. Roentgenogram of the hip (Fig. 1) showed dorsal dislocation complicated by fracture of the acetabulum, a large portion of the rim being displaced upward and laterally. Under ether anesthesia the lacerations were sutured and the right ankle put up in plaster. The hip was reduced without difficulty by the ordinary Bigelow maneuver, but the dislocation recurred on slight flexion. Accordingly it was maintained in full extension after the second reduction. X-ray at this time (Fig. 2) showed the large fragment of the posterior rim displaced as before. The next day his greatest complaint was cramping pain in the left calf, with hyperesthesia over the distribution of the superficial peroneal nerve. This was accompanied by foot-drop and probably was due to the injury of the sciatic nerve by the head of the femur when it was forced backward by the accident. Since the displaced fragment seemed to represent so much of the posterior wall of the acetabulum, it was felt that dislocation would recur if the fragment were not replaced.

At operation, September 12, 1928, an incision was made in a line from the tip of the trochanter to the posterior superior spine of the ilium. The joint was approached by splitting the glutei and

dividing the short rotators. The head of the femur was exposed. The muscles near the joint were contused and the capsule was in thin shreds, being detached from the rim of the acetabulum. The joint was full of blood clot but the head of the femur was uninjured. The triangular fragment seen in the x-ray proved to be the entire posterior shelf of the acetabulum, which was rotated 180° upward and outward, pivoted on its base at the superior part of the rim. It was about 6 cm. long and at its base was about 2 cm. thick on the joint surface, leaving a shallow acetabular cup with ample room for the head to slip out. There was a smaller fragment about 1.5 cm. square from the inferior portion of the rim which was free in the joint. This fragment had no blood supply and was removed. The tip of the larger fragment was held out and up near the trochanter by interposed muscles, and even after replacement, which was accomplished with some force, its soft tissue attachments tended to pull it out of position, there being no capsular attachment remaining to hold it in place. A Sherman screw was used for fixation of this fragment to the ischium on account of this stress, care being taken to keep the screw away from the joint surface. The remnants of the capsule were approximated as nearly as possible over this with interrupted sutures and the wound closed in layers without drainage. There was little hemorrhage and the patient's condition was good at the close of the operation.

The limb was held in extension and abduction by traction, with the patient on a Bradford frame. There was considerable postoperative swelling, and much pain for forty-eight hours. This soon subsided and he was comfortable except for the traumatic neuritis, which persisted for some weeks. The wound healed well except for superficial infection, following removal of dressings by the patient on the first day. Postoperative x-rays taken September 17 and October 10 (Fig. 3) showed a normal hip except for the presence of the screw. Passive motion in traction was started on the seventh day, and on the twenty-first day the traction was removed and active motion allowed. On October 12 the right ankle, which had received motion and massage after fourteen days, showed painless union in good position, and the supportive dressings were removed. He was allowed up in a wheel chair on October 22 and given crutches on November 2. At the time of discharge December 5, he was walking well without support, with no disability except for slight residual foot drop. Flexion was possible to beyond 90 degrees and there was no limitation of adduction. Adduction was diminished about 5 degrees but all motions were painless. There was no shortening. The patient now is able to assume his duties as a railroad fireman, 123 days following the accident.

COMMENT

Study of the skeleton shows that the anterior and superior portions of the acetabulum are formed by a depression in the ilium and superior ramus of the pubis, while most of the posterior wall is formed by a shelving process of the body of the ischium. When the thigh is flexed to a right angle and slightly adducted, force applied in the direction of the long axis of the femur may cause the head to strike this shelf with great force. This was apparently the mechanism of fracture in this case, the patient being thrown violently forward while in a sitting position, striking his knee on the dash of the car. The two patients reported by Breton and Blondeau⁴ were injured in a similar manner, and these authors are of the opinion that such fractures complicating dislocation of the femur will be more frequent with the increasing use of the automobile. In Gatewood's¹ case the



Fig. 2

Fig. 2. The dislocation has been reduced, but the fragment remains displaced, with its tip near the trochanter, in such position as to prevent abduction.

patient was run over by a truck, the differential housing on the rear axle striking the outer aspect of the thigh, with the limb drawn well up. A blow on the trochanter is more liable to cause central fracture of the acetabulum, with or without inward dislocation⁸, but we recently have seen a case in which fracture of the posterior rim followed a fall on the trochanter from the top of a box car. There was no dislocation of the hip and little displacement of the fragment. Recovery with perfect function followed fixation in abduction for four weeks.

The symptoms of this condition are those of dorsal dislocation of the hip, with recurrence after reduction, and it must be suspected when there is difficulty in maintaining reduction. Diagnosis should be made by x-ray before reduction, as in most cases manipulative reduction of the hip will pull the fragments into place by the capsular attachments. Injury to the sciatic nerve, which occurs in as high as 33 percent of fractures of the acetabulum⁸, may complicate recovery and should be borne in mind in the original examination.

After reduction, simple fixation in plaster with the limb in extension and abduction will be sufficient in most cases to prevent recurrence and will give good functional and anatomical results. In some instances, especially when the upper portion

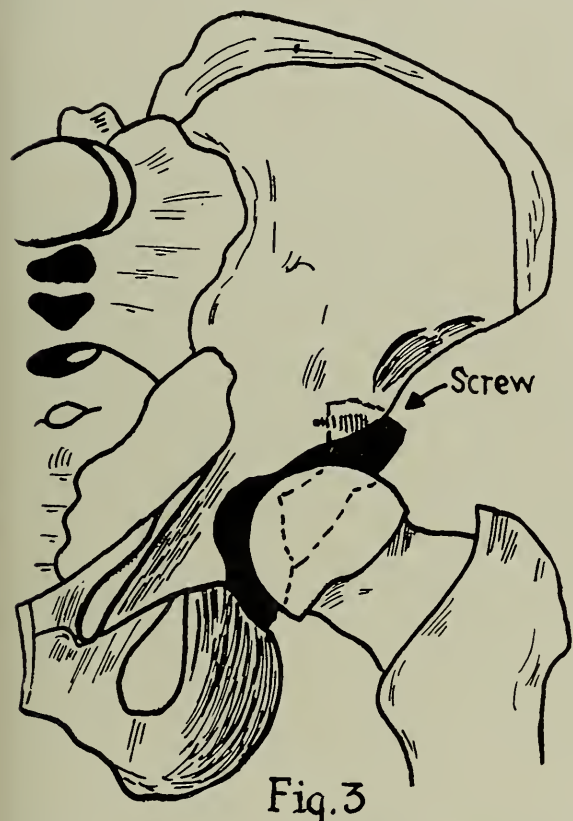


Fig. 3. Postoperative picture, showing the fragment replaced and held by a Sherman screw.

of the rim is broken off, traction in extension and abduction may be advisable to prevent displacement. The occasional case, such as the one reported here, in which the fragments are far out of position, requires operative treatment. If open reposition is not done the position of the fragment may prevent abduction if left undisturbed, or may favor recurrence of the dislocation when weight-bearing is resumed. Posterior incision of the Kocher or Ober type gives good access to the posterior portion of the hip joint, and in these cases is probably preferable to anterior or lateral approaches. Early active and passive motion insures better function and shortens the convalescence.

CONCLUSIONS

1. Fracture of the posterior rim of the acetabulum may occur from force transmitted in the direction of the long axis of the femur when the thigh is flexed and slightly adducted. This is likely to happen in certain automobile accidents when there is a sudden stop.

2. If the fragments come into good position when the hip is reduced, fixation by plaster or traction gives good results. In case the fragments cannot be replaced by manipulation, open reduction with or without internal fixation gives a stable hip with good function.

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PEPTIC ULCER

(WITH A REVIEW OF THIRTY-TWO SURGICAL CASES)

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The development within recent years of more accurate methods of checking up on disorders of the stomach and upper bowel, has served to indicate that a large percent of the cases then being considered and treated as chronic indigestion or dyspepsia, were in reality due to peptic ulcers.

The improvement of the x-ray, more frequent laparotomies, greater interest and care in autopsies have gone hand in hand with an ever increasing knowledge of stomach and intestinal chemistry to aid in correct diagnosis and logical bases for treatment.

For years in the obvious cases associated with hemorrhage or even perforation, the clinical entity as such had been recognized and treated, but it remained for men within the past decade to place its recognition and treatment upon a scientific basis. Among these one may mention Lenhart, Von Luebe, Stockton Einhorn, Sippy, Schryver, whose pioneer contributions in this field have been enlightening and invaluable.

As usually encountered, the peptic ulcer — either gastric or duodenal — is single, round, and presents sharply demarcated walls or edges lending to it the descriptive term of "punched out appearance". In the gastric form, a glistening indurated base with the ulcer occupying a more or less central position is most commonly seen. This is true to a much lesser extent in the duodenal

type. Granulation tissue is noticeably absent in both.

Etiologically, the peptic ulcer is now known to occur more commonly in men than in women. This is a reversal of statistics of a few years ago.

In this series of thirty-two cases, twenty-two were in men and ten in women. This may possibly be due, as mentioned by Allen A. Jones¹, to hurried and injudicious eating, excesses in tobacco, alcoholic drinks, irregular hours, especially at meal times, and worry. Although worry and nerve strain have long been considered as important predisposing causes—as they undoubtedly are—one cannot overlook some curious facts.

In the Central American tropics, where worry among the natives seems especially conspicuous by its absence, there is a high incidence of gastric or duodenal ulcer. It may be that the constant ingestion of the highly peppered and seasoned foods, combined with the liberal quantities of native alcoholic drinks which they enjoy, tend to produce the ulcers and gastric malignancies that abound. It certainly cannot be attributed to overwork and worry.

C. P. Howard states that in the United States, post-mortem studies place the incidence at 1.32 percent. In Europe it is five percent and in London, *per se*, 4.2 percent.²

As to age, peptic ulcers are seldom encountered in infancy, childhood, or early adolescence. E. G. Cutler has analyzed twenty-nine cases in children in which in six the symptoms were noted within the first few weeks following birth. Eight were under seven years and nine were between eight and thirteen years of age.

Men seem afflicted most commonly between the ages of thirty and fifty and women slightly younger. In this series of both men and women the following proportions obtained:

Between 15-25	6
Between 25-35	3
Between 35-45	8
Between 45-55	7
Between 55-65	7
Between 65-75	1

The youngest case coming to operation with an acute perforation of a gastric ulcer was nineteen years of age. The oldest was a woman of sixty-six years with a chronic hypertrophic ulcer of the pylorus with obstructive symptoms. Five of the six cases under twenty-five came to surgery on account of perforation.

With reference to race, the Japanese and Chinese seem the least afflicted. Probably the United States and England are the most afflicted.

It has been thought that, since vagotonia and vagotonic states seem to run in family lines, there is some family predisposition to peptic ulcer. Out of this series, twelve gave definite histories of the presence of chronic stomach trouble occurring in the parents, usually the father.

Jones³ in his monograph on the subject, be-

lieves that the tendency is transmitted along the autonomic nervous system.

Occupation seems to play a small part. Of the men, eleven were farmers, three were school teachers, two bakers, two store-keepers, one accountant, one general laborer, one plasterer and one car inspector. Among the women, eight were housewives, one a printer and one a shop-keeper. Osler states that it is seen frequently in shoemakers and is generally more common among the hospital classes. It seems unlikely that the old combination of filth and squalor that predisposes to so many diseases has much to do with the production of peptic ulcer, for it is found fully as frequently among those who are not subject to this combination as among those who are. The general incidence within the rural districts is practically the same as found in the cities, that is, between four and one-half and five percent.

Following the epochal work of Rosenow, it was thought that the solution of the mystery of the actual causation of gastric or duodenal ulcer was at hand on the basis of focal infection. This, while helpful, still seems far from being conclusive in its application to the human system as to the causation of the majority of the ulcerous lesions.

Of the toxic agents, alcohol is conceded to be the most potent in aggravating a peptic ulcer once developed and, when imbibed to any great extent it probably aids in its production. It is a familiar observation that a complete train of acute stomach ulcer symptoms can often be lighted up from a state of comfortable quiescence by ingestion of even a small quantity of alcoholic beverage, however enjoyable it may be at the time.

While occasional cases may, at least symptomatically, follow blows upon the upper abdomen it is not likely that this, as a causative factor, is at all comparable to the repeated dietary insults to the gastric and duodenal mucosa. It may be that certain sensitization food reactions with their herpetiform lesions within the alimentary mucosa are responsible for the localized devitalization of tissue with resultant ulcer formation.

In the aged, peptic ulcer is commonly associated with generalized circulatory, nutritional and degenerative changes within the mucosa. The ulcers seen in individuals with elevated hemoglobin as is found in anemia chlorosis were formerly considered as being produced by these conditions. Recent observations indicate that they are a result rather than a cause. Especially is this true in the bleeding type of peptic ulcer.

In association with other diseases or as a sequel to acute febrile infections, it is uncommon to find peptic ulcer. However, the duodenal ulcer is observed very frequently after extensive superficial burns.

It has been suggested that some toxic substances resulting from the absorption of the devitalized tissue is secreted with the bile and this injures the duodenal mucosa with resultant ulceration. An-

other theory is that the anti-ferments, which it is thought exist and prevent destruction in the healthy mucosa cells, are interfered with, permitting dissolution of the cells themselves and subsequent ulcer formation.

Certain chemicals, notably toluylendiamin, injected hypodermically into dogs will likewise produce duodenal ulcers.

The septic embolism or thrombosis theory of the mucosal vessels as advanced by the German school and studied by Rosenow, seems to be the most logical even though there has been no explanation as to why the ulcers seem to choose certain areas in the stomach or bowel for their location in preference to others.

Mann and Williamson have experimentally succeeded in producing in dogs ninety percent of ulcers in the jejunum by anastomosing the duodenum into the ileum and similarly connecting the jejunum to the pylorus. In so doing, the alkaline fluid from the bile and pancreas is directed into the ileum and the erosive gastric juice poured directly into the jejunum.

These experiments are interesting because of the fact that occasionally ulcers of the duodenum and jejunum are met with a short time after a gastroenterostomy has been performed for the relief of a gastric ulcer. Figures given from the Mayo clinic show this to occur in about one-tenth of one percent.

Pathologically, as before mentioned, the acute ulcer is round, punched out, has clean-cut edges and a smooth floor. One with a diameter of one-fourth inch is generally considered large.

In the stomach, as this type merges into the chronic form, the size increases to the point where it may involve a considerable portion of the lesser curvature or even the adjoining walls. In one of this series, the area of induration accompanied by perforation was over an area fully as large as a dollar bill.

The edges are no longer sharp, but more often terraced and the outline, instead of being circular, is frequently sinuous. The base is commonly much thickened and, to the examining hand, may feel almost like cartilage.

In the chronic type, the floor may be formed by the submucosa, the muscular layers or, as occasionally happens in cases of slow perforations, the walls of neighboring organs or omental masses about scar tissue. In seven of the cases analyzed, the gall-bladder was embodied in the omental and scar tissue masses about the causative ulcer area in the stomach or duodenum.

Osler states that ninety percent of gastric ulcers are to be found on the pyloric end; that nearly all duodenal ulcers are in the first or ascending portion and more than one-half extend up to within three-fourths of an inch of the pylorus, while twenty percent involve the margin of the pyloric ring.

While multiple ulcers may occur in the stomach,

they are not common. This is not true of the duodenal type.

In operating for chronic ulcer in the presence of considerable infiltration within the walls, or masses of adhesions, it is not always easy to discern whether the ulcer is gastric or duodenal. Theoretically, the pyloric vein is the dividing line.

In the stomach post-mortem findings by Welch⁴ give seven hundred ninety-three cases, two hundred eighty-eight on the lesser curvature, two hundred thirty-five on the posterior wall, sixty-nine on the anterior wall, ninety-five at the pylorus, fifty at the cardia, twenty-nine at the fundus, and twenty-seven on the greater curvature. Of the peptic ulcer, the duodenal is said to be encountered much more frequently than the gastric.

In this series, ten were definitely duodenal in location, four were doubtful, being apparently at the pyloric ring, and the remaining eighteen were gastric. Three were in the lesser curvature, two in the anterior wall near the pylorus, one on the greater curvature, and the rest on the posterior wall near the pylorus.

Sippy, in collecting records of three thousand cases coming to autopsy, finds the following ratios to prevail:

Lesser curvature	35%
Posterior wall	30%
Pylorus	12%
Anterior wall	9%
Cardia	6.5%
Fundus	3%
Greater curvature	3.5%
Anterior and posterior wall	1%

The associated pathology of peptic ulcer is seldom of as grave import before perforation as after it. Gall-bladder disease with stone formation was seen in seven cases of the thirty-two coming to surgery. Chronic appendicitis was seen in ten cases. There does not seem to be nearly as constant relationship between peptic ulcer and chronic appendicitis as there does between gall-bladder disease and this condition.

With slow but extensive erosion or slow leaking of the chronic ulcer, the picture becomes different. Here one often encounters hemorrhage, either mild or severe—and either single or repeated—depending upon the extent and size of the erosion process as it involves the blood vessels.

The percentage of recognized hemorrhage associated with ulcer within the stomach is given between eight and ten percent. That of the duodenal type runs slightly higher.

The erosion of the pancreatic-duodenal artery, of the hepatic artery and rarely even of the portal vein have been recorded as processes of a spreading ulcer. Even small aneurysms have been found in the floor of chronic peptic ulcers. On the posterior wall of the stomach erosion of the splenic artery may take place. The most common vessels to bleed are branches of the artery of the lesser curvature.

Cicatrization is one of the most common sequelae of the chronic ulcers of either location. In the stomach, it not infrequently leads to pyloric stenosis, deforming perigastric adhesions, or even hour-glass stomach. In the cases here reviewed, pyloric obstruction was encountered in four cases. Definite perigastric adhesions were seen in practically every case of chronic ulcer that came to surgery.

Perforation of the peptic ulcer occurs in approximately twenty-eight percent. These figures by Musser⁵ in an analysis of one thousand eight hundred seventy-one cases. The duodenal ulcer seems to have perforation as a complication somewhat more often than the gastric.

The figures in this small series show six perforations in the duodenal and ten in the gastric, or a percentage of fifty. Acute perforations such as these always lead to a rapidly developing peritonitis. When the perforation is on the posterior wall of the stomach, the gastric contents are poured into the lesser peritoneal cavity first. Occasionally when this happens, the leakage may be walled off and a subphrenic abscess developed.

Less common complications of perforation gastro-duodenal or gastro-colic fistulae, perforation into the pleural cavity, empyema of subcutaneous tissues and, rarely, gastro-cutaneous fistulae. Osler mentions a perforation into the pericardium.

General or diffuse peritonitis with none of the rarer complications were observed in all of the cases reported as being perforated.

For years there has been the observation that in a certain number of cases malignancy seems to be engrafted upon, or else develops in conjunction with peptic ulcers. McCarty, in analyzing two hundred sixteen stomach resections, finds that seventy-one percent of the resected cancer specimens were associated with ulcer and that sixty-eight percent of the resected gastric ulcers were associated with cancer. Taylor and Miller, in analyzing one hundred eighty cases of cancer of the stomach, conclude that the incidence of cancer upon an ulcer basis did not exceed seventeen percent.

Three cases in this group which clinically were hypertrophic ulcers of the pylorus, in which resections of the stomach were done, were diagnosed by pathologists as carcinomata.

The symptoms of peptic ulcer as usually encountered are striking in this phase—that they occur with irregular periodicity over a long extent of time; that there are marked periods of exacerbations and remissions during which the patient emphatically realizes that he has something wrong with his stomach or else in his relaxing period of remission is glad to forget and enjoy his temporary freedom.

Cases with no symptoms until perforation or hemorrhage develop as the first intimation of gastro-intestinal pathology are rare. One case in

this series, a young baker, denied having any stomach trouble until less than a week before he was brought to the hospital with a perforation.

Epigastric pain and dyspepsia seem to be the predominating and most constant symptoms. The pain is variable, being from a slight gnawing or burning sensation in the pit of the stomach to excruciating paroxysms radiating to the back and sides as well as in the epigastrium. Generally the appetite is good and, if the meals are light, are well tolerated, the patient feeling comfortable until two or three hours after eating, when the gnawing gastric irritability makes itself manifest. This is often relieved pro tem by baking soda or a glass of milk, only to return again when the stomach gets empty. Often in the night this type of distress demands attention.

Nausea, eructation, regurgitation and often vomiting accompany this hunger pain syndrome.

If the symptoms have forced the patient to a diet, and they frequently have even before consulting a physician, there is apt to be constipation, loss in weight and, quite frequently, a rather severe anemia.

Acid fruits and uncooked foods, as well as beverages of carbonated water or more especially alcohol, are apt to bring on an attack of characteristic paroxysmal pain. The patient is usually aware of these consequences and after a few experiences, uses discretion in their ingestion.

Active hematemesis was present in six of these cases. In one it was repeated and the occurrences extended over a period of almost eight years. Before the actual vomiting of blood there is usually a profound weakness, pallor, perspiration, thirst and nausea. Not infrequently the patient faints. The stomach does not tolerate free blood well and the nausea and vomiting occur soon after the bleeding sets in. Occasionally the hemorrhage is so severe that blood transfusion is necessary to aid in supporting life. Jones, in his monograph previously alluded to, states that hemorrhage is more common among men than women.

Bloody or tarry stools usually persist for two or three days after the hemorrhage has apparently stopped. Nine of the cases of this group showed blood in the stools. It is more than likely that this percentage would be much higher, if not occurring in all of them at some time during their course, but their observation was from a few minutes to a few days before surgical intervention.

The most striking and dangerous complication of peptic ulcer is acute perforation. While at times it may occur without much warning, the majority of cases complain for a period of time ranging from a few hours to three or four days of an increase in the intensity of the epigastric pain. This may assume a constant boring nature and not be relieved by the usual alkalis or food.

With the actual perforation, which is sudden, the epigastric pain is excruciating, deep-seated, and persistent. It is only slightly relieved by the

usual narcotic doses of morphine. This pain soon spreads, with the spreading peritonitis which is quickly excited, and involves the entire belly.

Nausea is common, but vomiting is not constant. In the sixteen perforations here recorded, vomiting was present in four cases—and only in one was it severe.

Shock is present from the time of onset and is characterized by pallor, cold, clammy perspiration and a weak and rapid pulse. The temperature is at first subnormal, but as peritonitis develops, it rises rapidly.

The most characteristic and persistent symptom noted in this series of perforations was the board-like rigidity of the belly walls, especially the upper part. It is present from the time of the perforation and relaxed only under the deepest ether anesthesia.

In one of these cases, symptoms and signs of appendicitis were closely simulated. It was found that the perforation was on the anterior wall of the stomach and that the gastric contents had collected in considerable quantity in the right iliac quadrant. This was perhaps due to the position the lad assumed after his violent pain began.

The evidences of general peritonitis, such as tympanitis, vomiting, progressive dehydration, weakness, usually follow and death occurs in three to five days.

Occasionally a tag of omentum or plastic exudate will close a small perforation and, if only a small quantity of stomach or duodenal contents have escaped, a spontaneous recovery ensues.

One case in this group terminated in this way except that a secondary abscess developed and upon opening the abdomen for drainage, the omental tag closing the perforation was inadvertently pulled away exposing the punched out hole very plainly.

Slow perforation from erosion does not show the violence of the acute type, for the small apertures are generally sealed over with a plastic lymph or omental tags and, except for temporary exaggerations in the prolonged epigastric disturbance, there may be no unusual symptoms. In case of abscess about the site of perforation, a sepsis syndrome with chills, fever, sweats, general malaise and loss of strength is present in addition to the local abdominal evidence of purulent pathology.

During the course of a peptic ulcer, symptoms referable to the nervous system may be severe. Among these may be mentioned frontal headache, anxiety, neurosis, clamminess of hands and feet, and unusual general irritability.

The acid eructation commonly referred to as "heart-burn" is very common. It was present in twenty-nine of the thirty-two cases reported.

The diagnosis of gastric ulcer is based generally upon the chronic irritative nature of the upper abdominal symptoms, the pain with its irregular periodicity occurring in the epigastrium and often

under the shoulder-blades, the temporary relief from distress by alkalies or food and its return after the stomach is empty, usually two to three hours after a regular meal; the presence of a high acid content in a test meal; the frequent demonstrable presence of blood in the gastric fluid, or in the feces; the history of burning eructations with occasional nausea; vomiting; and last, but very important, especially in chronic ulceration, the characteristic shadows demonstrated by the x-rays.

The duodenal ulcer is credited with being much more common in men; with having more constant hunger pain, less frequent vomiting, higher gastric acidity, less hematemesis and on the whole, running a milder course with fewer scar deformities.

Both have many signs and symptoms in common and, occasionally even in a laparotomy, one may experience difficulty in deciding whether the ulcer is all gastric or all duodenal.

The Einhorn thread test, with its characteristic stain, has been used extensively to prove or disprove the existence of peptic ulcer as well as to determine its location. In the duodenum, bile stains were readily discernible on the thread.

The x-ray, with its improvement in technique and interpretation, is supplanting this test to a considerable degree.

The differential diagnosis must be made, in the chronic stage especially, from appendicitis, gall-bladder disease, nephrolithiasis, pyelitis, perinephritis abscess, ureteritis, tubercular peritonitis, gastric carcinoma, chronic pancreatitis, syphilis with such manifestations as are seen in tabes, and lastly small epigastric herniæ.

In case of perforation, one must necessarily differentiate it from all of the conditions producing acute violent and persistent pain within the belly, such as acute appendicitis, acute pancreatitis, beginning pneumonia, thrombosis of mesenteric vessels, acute bowel obstruction, cysts with torsion, ectopic gestation, acute cholecystitis, kidney colic, etc. There is in none of these, as a rule, the degree of belly rigidity, unless it be perhaps acute hemorrhagic pancreatitis, that there is with the onset of peptic ulcer perforation.

The treatment of gastric or duodenal ulcer is a phase about which volumes have been written.

Essentially it is considered in two fields, medical and surgical, both of which seem to have their merit. In acute perforation there is no argument. Surgery is demanded to close the aperture if possible and establish abdominal drainage. In the cases that seem to resist the best efforts of diet and rest, a gastro-enterostomy will sometimes effect a speedy cure. The European School adopts a more radical view and practices either excision of the ulcer area or partial gastric resection as the method of choice in treatment.

Sippy, Einhorn, Lenhart, and others claimed that fully ninety-five percent of all peptic ulcers

can be cured medically. The Sippy treatment, briefly outlined, is that the patient is put to bed, the gastric contents analyzed upon admission and frequently thereafter to check up on the acidity which must be combatted if the ulcer is to heal.

Three ounces of a mixture of milk and cream are given every hour from seven a. m. to seven p. m. After one or two days, a soft egg with a cracker and butter is added to one forenoon feeding and three ounces of a well-cooked cereal is added to one of the afternoon feedings. Gradually the cereal and eggs are increased and with it are added custards, jellies and other light foods as they are tolerated by the stomach so that by the end of six to eight weeks a full light diet is being taken. He emphasizes that, while under treatment not more than ten to fifteen ounces be taken at one meal and that enemata should be used in place of active cathartics.

The gastric acidity is neutralized by alkalies. In an average case this is controlled by the alternate administration, mid-way between feedings, of powders, the first consisting of ten grains of heavy calcined magnesia and sodium bicarbonate and the second containing ten grains of calcium carbonate and thirty grains of sodium bicarbonate. In addition, these powders are given every half hour after the last feeding for four or five doses until the stomach contains no food as is occasionally determined by the use of the tube.

Usually all powders are stopped for five days at the end of ten weeks and are then resumed for five or six weeks. An ulcer under this regime is usually cured in a year or less.

In the Lenhartz treatment considerably more food is given than in the Sippy method and bismuth subnitrate in two-gram doses three times a day for ten day intervals is the salt used.

The Einhorn duodenal feeding is used although the difficulty seems to be the comfortable retention of the tube and the accurate determination of its position. Its inventor claims excellent results from its use, especially in rapid amelioration of symptoms.

Rest, ice bags to the abdomen, morphine freely administered, and, if necessary, blood transfusion, seem to be the most efficient measures in controlling active hemorrhage.

Surgically considered, the chronic ulcers in this series were, with three exceptions, treated by gastro-jejunostomies only. The three mentioned were accompanied by pylorotomies, two of which are living after two and five years respectively. The other died the day following operation.

It has been the author's impression, not only with these cases of gastro-jejunostomies but others, that the best clinical results are obtained if a few cardinal principles are observed at the time of operation.

First, that the jejunum be selected and placed so that it is isoperistaltic with the stomach and fits snugly without sagging. This may be readily

determined from its relative position to the ligament of Trietz. Second, that the aperture made in the stomach and jejunum be not longer than the circumference of the jejunum, preferably about one and one-fourth to one and one-half inches. Third, that additional silk sutures be placed beyond the angles of union for reinforcement and lastly, that the margins of the mesocolon be sewn about the gastro-intestinal suture line to prevent herniation into the lesser peritoneal cavity.

In the acute perforative stage, the apertures were closed with purse string sutures of fine chromic catgut and tags of omentum tied over the area. In all, there were tube drains placed in the upper abdomen and in twelve there were additional stab tube drains in the pelvis.

The operative mortality in the cases of acute perforation was, in the duodenal ulcer, five and in the gastric ulcer, three cases.

In the operations for chronic ulceration there was one death.

The longer surgery is delayed following acute perforation the less the chance for recovery. The following case history is given because it typifies the average ulcer history in these cases and in addition that his perforation was present at least thirty hours before surgery and that he survived and is living today.

Mr. E. C.—a farmer, age fifty-six, was admitted at Lutheran Hospital April 17, 1926.

Father died of carcinoma of the stomach.

Patient complained of a sense of weight in the stomach, as of a heavy ball, occasional attacks of nausea, vomiting of extreme sour and bitter vomitus, occasional fainting spells, frequent severe bloating in the region of the umbilicus which would be relieved by the ingestion of magnesium sulphate or large doses of soda, loss in weight of twenty-two pounds, severe attacks of epigastric cramps would be brought on by heavy lifting. The entire course of the disease was marked by extreme chronicity marked by exacerbations and remissions of epigastric distress. The patient has vomited small quantities of blood and has had tarry stools.

The day before his admission he was suddenly seized by a violent pain in the epigastrium which at once incapacitated him. The pain was excruciating in character and persisted until his admission. He did not vomit, but was cold, clammy, and completely prostrated.

On April 17, a high right rectus incision was made. The belly was filled with a yellowish pus-like liquid. The appendix seemed slightly inflamed and was removed. The incision was enlarged in the region of the epigastrium. The stomach was enlarged and the pylorus was covered with a thick, gummy exudate. A large amount of stomach content was discovered. The aperture was located in the posterior wall of the pylorus, closed with a purse string suture and a tag of omentum was tied over it. Two gauze wicks

were placed in the region of the foramen of Winslow, a cigarette drain and one open tube in the lower angle of the wound.

He was discharged as cured on May 31, 1926.

Another case history depicting the average chronic peptic ulcer is as follows:

Mrs. S. F. S.—housewife, age forty-two, was admitted June 22, 1926. Normal weight one hundred twenty-five pounds. Now weighs ninety-seven. Appetite good, but she is afraid to eat. Has had stomach trouble for fourteen years. Had a burning pain in stomach, beginning about two hours after meals. This was relieved by ingestion of soda or food. Attacks would last two weeks and she would have four or five attacks each year. Present spell came on about three months previous to admission, and has persisted. The distress now begins about nine p. m. and lasts until two a. m., when she begins to vomit. There has been no vomiting of blood. Some pain in the right hypochondrium, but no colic. At operation, an obstruction at the pylorus is noted. This is hard and button-like. There is no regional adenopathy. The stomach is markedly dilated, the walls are thickened and covered with thick sheets of membrane. The jejunum is flattened or collapsed. The pancreas is adherent to the stomach in the region of the pylorus. The gall-bladder contains a few stones. A posterior isoperistaltic gastro-jejunostomy and cholecystectomy was done. The patient was discharged July 17, 1928.

The average length of time that the cases in this series remained in the hospital was twenty-six days.

In the gastro-enterostomy cases it has been the practice to allow no water by mouth for the first twenty-four hours, but Fischer's solution or five percent glucose per rectum ad lib. The second twenty-four hours, sterile water in dram amounts is given every ten or fifteen minutes as desired. The third day, the amount of sterile water is increased to one ounce. On the fourth, a liquid diet is begun with the addition of an ounce of buttermilk, gradually increasing the diet until a light diet is given about the tenth day.

It is strange to note how often after acute perforation of a peptic ulcer in which the patient recovers, he shows no further symptoms of gastric or duodenal disturbance.

In closing, it might not be amiss to mention that since many of the heretofore cases labeled acid, indigestion, dyspepsia, chronic gastritis, etc., are in reality ulcers, each case should be given sufficient time and effort to rule such ulcerations out definitely before attempting to treat them by unscientific diet or medication.

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THE VANISHING COUNTRY DOCTOR* REFLECTIONS COVERING THE PAST THIRTY YEARS

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Through medical journals and the lay press for several years we have been reading of the deplorable situation which has arisen or is arising on account of the dearth of country doctors. Perhaps one who has had over thirty years of country practice, the last half of which was spent as practically the only physician in the community, might add some light on the situation. It might be that you will attribute some of my statements to the rantings of an unsuccessful career, but I want to assure you that I have no reason for complaint on my own part, as I have reached practically the high points in positions of honor and success that is within the power of such a community as that in which I live to bestow, and as Saul said of Tarsus, "It's no mean city."

In reviewing the various reasons for the lack of country physicians, there are a few outstanding conditions that might possibly lead up to some definite reasons why this condition exists—if it really does exist—because it is apparent that there is a scarcity of physicians in only certain localities inasmuch as the physician of today can cover much more territory than in years past and the real scarcity is felt more on account of the inconvenience to call at the physician's office rather than the inability for the physician to call on the patient. However, this condition is true—thirty years ago within a radius of fifteen miles from the town in which I live there were twenty-five physicians while to-day only eight physicians cover the same territory. This does not include the city of Lafayette, where thirty years ago there were about twenty-five physicians while to-day there are forty-two, besides chiropractors, naturopaths and other cults. Going back to the reason for the situation we find it revolves about the two main factors in the case—the physician himself and the community needing his service.

As to the physician himself, probably the first great problem is the compensation for his services. The compensation of the country physician, while it is mostly what he makes it, has never been and never will be equal to that of the city practitioner. His intimate acquaintance with his patronage, his knowledge of their financial situation, his social and fraternal relations, his church and political affiliations, all have a tendency to make him lenient in both his charges and collections and while all this endears him in the hearts of the parents and makes him a marked favorite of the children of dotage as well as nonage, they do not help much in adding to his financial gains. Yet, with all the drawbacks in compensation, we must take into consideration the fact that his equipment and general overhead expense, from

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clothes to bridge parties for his wife, are at a minimum as compared with the city. His telephone rates are less, his garage bills less, his office secretary is less (if he has a good wife) and he is not called upon so often or as extensively for charitable and civic welfare promotions, although the cities are now reaching out for these purposes into every nook and corner. Therefore, with his charge practically in his own hands and his expense reduced to a minimum. I believe that the compensation of the country physician averages fairly well with that of the city; or could be made to do so without embarrassment to himself or his patrons. At least he should be able to keep himself and family in comfortable circumstances, educate his children and have enough to maintain him in his declining years,—should he fail in this he has the consolation of having two farms—the poor and the penal.

Another thing to consider is the country physician's ability. This should be of two sorts—the ability to know what he knows, and the ability to know when he does not know. I believe that the latter is particularly essential because when his community learns that he does possess this ability and is willing to admit it, he is more trusted and respected.

Starting out with all the energies and abilities of youth coupled with a good education, he must ever continue to fight to maintain his standard. This calls for extra study—postgraduate work every two or three years and even then on account of lack of a variety of cases of importance due to his limited field, he is apt to lose interest and become a laggard in his profession and gradually become discouraged with his location and seek a new field in a larger place where he can come in contact with a more diversified practice.

He can scarcely become an expert surgeon, gynecologist, or eye, ear, nose and throat man because of the infrequency of the cases, but he can and should become a good obstetrician, pediatrician and general practitioner, with case records for reference and study and the elimination of cheap or guess work. Lacking in these things leads to loss of patronage, then to discouragement, then to a new field, thus leaving another community without needed medical service.

The personality of the physician is to be taken into much more consideration in the country than the city. His intimate association with his patients and their families removes much of the business aspect from his profession—in fact this intimate association must be such that it removes or at least keeps hid the practice of medicine as a business, and renders it one of loving kindness and tender mercy. For as soon as he neglects his personality he loses a large amount of business and then seeks new fields where business is business, and intimacy unknown.

What is true of personality is also true of morality, honesty and various other characteristics.

These are but a few of the many reasons why the physician himself does not enter, or when once entered, does not care to remain in the field of country practice and hies to other fields where these important elements in his country life can be discarded or at least overlooked. I do not mean to infer that the city physician should not have all or a part of these characteristics, but with his ever changing line of patients, his lack of knowledge from whence they come and whither they went, he is less liable to the discouragements and disheartenments of country practice and stays on the job.

Considering the other main factor which has much to do with the lack of country physicians—the community itself—I really believe we will find it the most important of the two. The matter of compensation for the physician for his service after all does not rest entirely with the physician himself, but the community as well. A community that desires the service of a physician must surely expect to pay for that service, either collectively or individually and the ethical physician prefers the latter.

While it is true that in every community there exists a certain number who cannot pay for the services, this number is so small that it affects his financial condition but little. Yet he must do this work gratis, for if he refuses to go he is eternally damned while the city physician can let them get some one else, and with the number of new physicians each year in the city who are seeking to get established, there is always some physician who will go. This is all equally true for those who can and will not pay. This latter class comprises no small number and are really the trouble makers for the country physician. You are a fine fellow until you start to collect—they fail to pay—you fail to go, then they start maligning you and go some place else and pay cash for awhile. This is the same class that runs a bill with the country grocer and then quits him and pays cash somewhere for a while, then repeats his game. They are in all communities, active in community affairs, talk much—give little—spend excessively. They are ardent gossipers and slanderers and a menace to the welfare of the community as well as to the physician himself. They are the class between the poor and the well to do, the honest and dishonest, and associate over the border line on each side and are in a position to do much damage on account of the beautiful exterior gild of good citizenship. A physician that can stand the invectiveness of this class is a graduate in the school of experience.

I would not do justice to the community in which I live, however, if I failed to mention the better citizen that stands by his community and his physician. It is to these people and these alone that a country physician looks for his compensation and encouragement that keeps him active in his profession in his chosen community.

The matter of compensation for the country physician is not the only thing that can make a community attractive. If a community could be made to realize, that in order for a physician to at least enjoy a part of his profession and appreciate the community in which he lives, that he should have a reasonable amount of rest and recreation at regular intervals, they could add much to his desire to continue to stay with them. It is almost impossible for a country physician to have regular office hours because the country people insist on going to his house. The same people that will sit in a city office for hours waiting until the golf score is fattened or the Kiwanis luncheon is over, will not spend five minutes in the waiting room of the country physician, but will "hunt him up", call him from his home, his barnyard golf, lodge, church, or social event, any hour from seven A. M. until 10 P. M. because they desire to go to town in the afternoon or to Aunt Jennie's for dinner and stop on the way. This is exceptionally true of Sundays or holidays and the country physician who enjoys these days of rest with the other free born, full blooded Americans must hie himself miles away in the early morning and return late at night.

The term country people, however, might be considered obsolete nomenclature, for with the changes of the present day, the suburbanite has a tendency to become the urbanite and they feel that the visit to the city physician's office is another mark of social standing rather than a need for better service. And so we have to-day many people in smaller towns and the surrounding country making frequent visits to the city doctor without informing their home physician—in fact, trying to keep it from him for they know that in an emergency—a stormy night or bad roads, he is their one best bet and they wish to keep in his good graces. However, sooner or later it comes to the ears of the country doctor, filling him with discouragements. Too often these visits are to the chiropractor, oestopath or naturopath—anything so it is different and they can spend their money and tell their neighbor. Of course this same condition of shifting sands occurs more or less with the city doctor but it is a sort of "Round Robin" shift and does not become general knowledge to the rest of their patients, while with the country physician it becomes neighborhood gossip and destroys his confidence in his community. When the people in a country community learn that their own physician is ready and willing to direct them to consultants or specialists when they need it or even desire it, they will learn much toward keeping a physician in their community. In connection with this phase we find another factor in driving out the country practitioner in the fact that all too often he refers a patient to, or calls in consultation, a physician from the city and loses that patient through unethical methods. This happens frequently enough that it causes the country physician a loss in finance and prestige. Then

too, with consultations and reference, for treatment, we find that in the majority of cases the consultant and operator secure a cash fee, or at least are paid first and the attending physician who works at both ends of the string waits until last for his compensation. This is a rank injustice, and a community that treats its physician in such a manner deserves to be without one. These are some of the reasons for the growing absence of the small town doctor. The same hold good in other country professions and trades. There are less grocery stores, less machine shops, less churches, less stops by railroad trains and many other changes. The small town is no longer a business community but a residential district and what were formerly active trades and professions are now mere accommodations. Even the business of farming is becoming more and more a lost art.

We must not overlook the menace of free clinics, state hospitals and county nurses. These institutions not only detract from the country physician's practice but are equally as detrimental to those located in the cities—the purpose and the outcome of the free clinic is well described by E. L. Epperson, M.D., of St. Louis, in *Medical Economics*, August, 1928, and I am taking the liberty of quoting him as follows:

"The association stands for, as the medical profession has ever stood for, the maintenance, at public expense, of adequate equipment for the proper treatment and care of the indigent poor.

"The free clinic has always been an institution by which certain physicians could appeal to the public, under the cloak of charity, and then use the vantage gained for self-aggrandizement and advertisement.

"The hypocrisy practiced in both public and private institutions of this kind has recalled such a flagrant state of abuse that the general practitioner finds himself compelled to interfere and use the power of organization to protect his legal rights.

"It has been estimated that fully forty percent of the patients treated at these institutions in St. Louis, are amply able, financially, to pay for private medical services."

It is true that the physician sometimes refers patients to free clinics but he does this in order to hold his patient, for if he does not refer them they will go anyhow and the chances are that he loses his patient. It sometimes happens that county nurses are quite free in their prescribing and recommendations and overstep the purpose for which they are appointed. We too often hear Mrs. Smith tell Mrs. Jones that she took her daughter to the free clinic—"not because we thought there was anything the matter with her but just to have her examined." What hope have we for yearly examinations when such conditions exist. No patient should be examined or treated in any county or state charitable institution unless they are designated as charity patients by the proper authorities

or unless they are willing to pay a reasonable fee. I am sure if this plan were followed the physician would have a larger income and more practice and the Red Cross, Tuberculosis Association and similar organizations would have less funds to raise in their annual drives and municipal taxes would be reduced.

We are not pessimistic. There is a reason for all this—changes in transportation, changes in education, changes in trade and profession,—something different, something new—see things, do things and be things, is the movement of to-day and it is driving out the country physician.

The National Grange is advocating less time at college, less training to supply the demand. Listen, the country people are not looking for this. Why drive a flivver when you can buy something better on time? They are not looking for economy or service but to have something bigger and better than their neighbor. Do you think for a minute that a young man will locate in a community where the unpaid-for children and later on, the unpaid-for children of the unpaid-for children drive better machines and wear better clothes than he and his family? I know these people well, their financial affairs, their social and political life, their family quarrels and petty jealousies. So does every country doctor.

It is a condition that will never be remedied unless there is a marked reversal of form. And why should it be? The city physician can reach the surrounding town very conveniently, the mail order houses and chain stores can supply their needs even extending them unlimited credit. Therefore, if the country communities want these conditions why not let them have them and let the young doctor locate in the city where he is blessed with a convenient hospital and laboratory, keeping in touch with all the advances of medical science rather than devoting his time and talent in being a mere accommodation for a restless and ungrateful community.

This is a short review of the situation existing between the country physician and his community as I see it. This condition has been of gradual growth and those of us who have practiced in the country for twenty or twenty-five years have become accustomed to the situation and it affects us but little as we still retain a large proportion, if not all, of our early practice—homes in which we are still looked upon as "The Family Doctor." I feel, however, that these conditions have much to do with the young doctor of today selecting the city in preference to the country for the practice of his profession.

PEPTIC ULCER OF ESOPHAGUS

Deductions made by CHEVALIER JACKSON, Philadelphia (*Journal A. M. A.*, Feb. 2, 1929), from eighty-eight cases of peptic ulcer of the esophagus suggest focal infection as the chief etiologic factor, with the tonsil as the most frequent site of the focus. Islands of gastric mucosa are accessory causes. Retrograde flow of gastric juice may or may not be a perpetuating etiologic factor, but it is certainly a cause of the pain. The most characteristic symptom of peptic ulcer of the esophagus is retrosternal pain or discomfort extending through to the back. Chronic esophagitis is accompanied by the same symptoms, but of less severity. Ulcer may be symptomless. The diagnosis of the peptic ulcer can be made certainly only with the esophagoscope. Esophagoscopy for diagnosis is indicated in every patient complaining of the slightest abnormality in swallowing or the slight degree of retrosternal pain or discomfort. The best treatment of peptic ulcer is by eradication of focal infection, plus the local esophagoscopic application of argentic nitrate, or bismuth subnitrate. Palliative control of the symptom, pain or discomfort is afforded by alkalis, especially sodium bicarbonate. Opiates are unnecessary and are contraindicated.

STERILIZATION WITHOUT UNSEXING

ROBERT L. DICKINSON, New York (*Journal A. M. A.*, Feb. 2, 1929), presents the results of his review of what has and is being done in California to effect sterilization without unsexing of the insane and feeble-minded. His survey in California institutions show proper safeguards when operations on men and women are advised in order to release them for return to work or to home supervision, and excellent surgical technic, with good results shown by the follow-up. The consideration and pictured details of various operative procedures with their surgical anatomy, as presented, argues for the simplest methods as the best. Dickinson favors low transverse incision. A review of the literature, including the reversible operations and nearly 400 "rejuvenations,"

brings up the discussion of nonhospital methods, such as heat to the testis, irradiation of the male or female gonad, and intra-uterine cautery stricture, chemical or electrical, visualized by the hysteroscope. Stress is laid on testing results by searching for spermatozoa in the semen and by insufflating the uterine tubes.

PREDOMINATING ORGANISMS FOUND IN CULTURES FROM TONSILS AND ADENOIDS

During the six months from November, 1927, to May, 1928, cultures were made by L. M. Polvogt and S. J. Crowe, Baltimore (*Journal A. M. A.*, March 23, 1929), from the interior of the tonsils and adenoids removed at operation in one hundred selected cases. Patients with a history of repeated attacks of tonsillitis were selected for this study. More than fifty percent were children under eleven years of age. After washing in seventy percent alcohol, the tonsils were ground in sand and cultures were made. The hemolytic streptococcus was the predominating organism grown in ninety-one percent and the staphylococcus in eight percent. In one case no growth was obtained. There is no apparent connection between the predominating type of organism found in the tonsils and the clinical symptoms. The majority of these cultures were made during the winter months, and all were made between November, 1927, and April, 1928. More than fifty percent of the patients from whose tonsils a hemolytic streptococcus was grown in pure culture were children under eleven years of age. The majority of those in whom a staphylococcus was the predominating organism were over twenty-five years of age. The average time between the last acute attack of tonsillitis and the tonsillectomy was one month. In eighty-one cases the hemolytic streptococcus was the predominating organism in both the tonsils and the adenoids. In eight there was a heavy growth of staphylococcus from both the tonsils and the adenoids. In ten there was a heavy growth of staphylococcus from the adenoid culture and a pure culture of streptococcus from the tonsils. A culture made by swabbing the surface of the tonsil is a reliable index of the predominating organism in the crypts.

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EDITORIALS

INDIANA BEHIND IN DIPHTHERIA IMMUNIZATION

Wasn't it in 1926 at West Baden that we, as the Indiana State Medical Association, adopted the slogan, "No Diphtheria in Indiana by 1930"? At that time we were contemplating the fact that the diphtheria death rate for the preceding year was the lowest in the history of Indiana, and were looking forward to the time when the scientific conquest of this disease could be put into actual practice. There is no doubt about the practicability of the plan to eradicate diphtheria by the universal immunization of susceptible children. In spite of this fact we have not been able to equal the rate reached in 1925. Diphtheria death rates per 100,000 population for the past five years are as follows: 1924, 8.1; 1925, 5.6; 1926, 5.9; 1927, 7.5; 1928, 5.7.

Last year there were 182 children in Indiana who needlessly lost their lives from this strictly preventable disease. This is enough to fill six average school rooms—or enough to fill a cemetery of some size—an average of a death every other day for an entire year. Besides those who died there were thousands of cases that recovered. We may as well admit that we as individuals and as a profession have fallen far short of the ideal set at West Baden. It is our own fault in the main. We cannot go out and pull children into our offices in order that they may be immunized, but we can keep the matter of immunization before the public. There are those who believe that the layman cannot be taught these matters, but the fact that so much progress has been made in lay instruction refutes this alibi most effectively. Other states and cities are getting a large percentage of their children immunized and we can do the same if we put ourselves to it. As a means of getting this matter before the public in the most effective way we suggest that the State Board of Health snap up its propaganda on diphtheria prevention, and that a few thousand little circulars be printed for distribution to the physicians of the state to be sent out with bills and other correspondence to laymen. A program of this sort must be kept constantly before the public if it is to succeed.

AMENDMENT TO FREE ANTITOXIN LAW

An amendment to the Free Antitoxin Law was adopted by the recent legislature and made effective March 11, 1929. This amendment includes rabies vaccine and scarlet fever antitoxin so that any physician who wishes to secure rabies vaccine or scarlet fever antitoxin for any case unable to pay for the same needs only to secure a free antitoxin blank from the health officer, fill out the blank and present the completed blank to his druggist, who is authorized to furnish the antitoxin or vaccine as called for in the blank. The completed blank then becomes the order or warrant for payment of the market price of the antitoxin or vaccine to the druggist by the county, city or town in which the vaccine or antitoxin is used.

Any physician can now secure free diphtheria antitoxin, tetanus antitoxin, scarlet fever antitoxin or rabies vaccine for indigent cases in this way. For the present the regular antitoxin blank must be used. New blanks will be available from the State Board of Health as soon as they can be printed. All health officers must keep themselves supplied with these blanks. The State Board of Health will furnish a supply of blanks to county, city and town health officers upon request.

Any physician can administer rabies vaccine. Now that the vaccine can be secured free, many cases unable to pay for the vaccine can be treated at home and not sent to the State Board of Health for treatment.

In this connection it is well to call attention to the fact that under the provisions of the Free Antitoxin Law, diphtheria antitoxin, scarlet fever antitoxin, tetanus antitoxin and rabies vaccine can be secured by any physician from any druggist for any case in which, in the opinion of the physician, the case is unable to pay for such antitoxin or vaccine.—*W. F. K.*

HOSPITALS AND FEE SPLITTING

Knowing that fee splitting is reported as an everyday occurrence in some of the "approved" Indiana hospitals, we are led to smile at a choice bit of bunk found in the report on hospital standardization for the year 1927 as issued by Franklin H. Martin, M.D., of Chicago, director-general of the American College of Surgeons. Dr. Martin says: "The practice of fee-splitting is unreservedly condemned and forbidden by the American College of Surgeons, and no hospital is acceptable for approval if this pernicious practice is known to be carried on. Each hospital is required to take a firm stand against this practice, by resolution of the staff or board of trustees. It is further recommended that individual signatures to pledges or resolutions be secured from all doctors practicing in the hospital, and a copy of same filed at headquarters. While fee-splitting may not be an issue in all communities or in all

hospitals, it nevertheless is required that the medical staff and board of trustees go on record against this practice. The medical profession and the hospital will wipe out this abominable and inhumanitarian practice." Dr. Martin then quotes a hospital on the Pacific Coast which offers an explanation in its anti-fee-splitting resolution which interprets to the trustees and the public generally some of the evils of the practice. The quotation is as follows:

"The division of fees, or fee-splitting, is the buying and selling of patients. The practice exists in various forms, but the most usual form is as follows: A general practitioner makes a diagnosis in which surgical interference is indicated. He then refers the patient to a surgeon for operation. The surgeon operates, collects a fee, and pays a portion of same to the referring physician—this last transaction being unknown to the patient. Sometimes the physician collects the fee 'for a surgeon' and retains his percentage as agreed with the surgeon. Sometimes the fee is divided with the explanation to the patient that the physician 'assists the surgeon' or gives the anesthetic. In many such instances the explanation is a subterfuge for fee-splitting. A competent surgeon usually has a regular assistant and an anesthetist with whom he is accustomed to work, and is more able in this way to do good work than if he permits each referring doctor to assist him.

"Undoubtedly the physician should be paid for the study and diagnosis of a surgical case. But he should be paid directly for this service by the patient. In the same way the surgeon should be paid directly by the patient. The surgeon frequently can be of service to the physician and to the patient by explaining to the patient the value of the study and diagnosis made by the physician. But the accounts of the physician and the surgeon should not be confused or rendered to the patient as a single statement.

"The evils of fee-splitting are:

"First—Fee-splitting makes for incompetent surgery. The surgeon who is party to the practice gets his cases usually not upon the basis of merit, but upon the basis of percentage of fees collected that he will give to the practitioner. The more incompetent he is, as a rule, the larger a percentage of the fees he gives to his co-fee-splitters.

"Second—Fee-splitting makes for unnecessary surgical operations. Under the fee-splitting system surgery becomes a commercial enterprise and not a professional service. Both the physician and the surgeon tend to make surgical diagnoses without adequate study, and the result is unnecessary surgery. Much of the unnecessary surgery of our present day is due directly to fee-splitting.

"Third—Fee-splitting, by introducing dishonesty into medical practice, lowers the entire med-

ical profession in the estimate of the public. The fee-splitter, for example, says to his patient, that he refers him to a most competent surgeon, when he knows well enough that if he, the physician, were to be operated upon, he would select another surgeon. Further, the fee-splitter usually poses before his patient as having received little or no fee for his services when, as a matter of fact, he has received a large fee indirectly from the patient. He holds such a fee really as a theft."

We are in hearty accord with the fine spirit manifested in the discussion of this subject, but it is enough to make a horse laugh to think how little attention the American College of Surgeons really pays to the question of stamping out fee-dividing. As a Fellow in good standing of the American College of Surgeons we may be accused of lack of loyalty, and possibly of back-sliding, but in answer to the charge we fully believe that we are justified in feeling just a little lack of confidence in "the powers that be" in the American College of Surgeons in carrying out the very commendable ideals established. In other words, we have reason to believe that altogether too often there is a winking at infractions of the very laudable rules established.

THE PHYSICIAN'S INCOME

In the February number of *Clinical Medicine and Surgery* Dr. J. Louis Webb discusses some of the phases of the economic side of the practice of medicine. He starts out with the assertion that the physician is entitled to a practical education and introduction into the profession, and that his education should enable him to occupy a suitable social and economic plane. The recent graduate in medicine should be backed up and require that his services be paid for by society, at least to an amount equal to the wages that he would have been able to earn as a laborer, plus some interest upon his investment and education. Therefore, it is suggested that the new graduate should be entitled to wages of \$125 per month or \$1,500 per year, and interest of 15 percent on \$45,000 invested in cash, time and wages lost while in college, or a total of \$6,750, making a grand total of \$8,250. It is admitted that he seldom will get it, but the writer says that it reflects upon our own manhood in that we do not demand at least a laborer's pay, and that we do not believe his investment and education is as good an investment as stock in some good business. A safe investment will bring a return of five or six percent interest. If the investment is questionable or speculative, and of course a medical education is speculative in a sense, then the return should be greater, and a fifteen percent return on a medical education is no greater than the average business man would expect on a purely speculative adventure. If we fail to demand the treatment granted all

other men, certainly we brand ourselves as incompetent. If society does not desire to pay this amount for our services, we should then consider making our investment comply with what society is willing to pay. A railroad can either supply poor equipment for its customers and have them pay accordingly, or it can supply superior equipment and educate its customers to pay for it. In fact, that is the principal upon which all large business operates. Medicine should demonstrate that it is entitled to be included with the successful modern business. Each physician is entitled to sufficient income from his practice to meet the overhead cost of practice. No physician buys a medical book strictly for his own pleasure. Medical books, then, serve as an illustration of the expenses that are incurred as the overhead of practice. Every physician is entitled to sufficient income to meet a personal budget that enables him to be as comfortable and as efficient as the banker, the lawyer, or the successful politician. He therefore is entitled to an income that meets his budget and secures his declining years, and these should be of sufficiently satisfactory nature to command respect and honor. Anyone who refuses or usurps these returns to individual physicians is worthy of condemnation, and the essayist says that those deserving reproof are the following: 1. Medical college executives. 2. Selfish members of the profession. 3. Laymen, including citizens, politicians, racketeers, philanthropists, social service workers and charity organizations. 4. Individual physicians who assume the pose of meek martyrs to their fellow men. 5. Officers of medical societies who fail to grasp their opportunity to make organized medicine effective. 6. Physicians who fail to support their profession. The question then is asked, "Can these persons and organizations wreck the ship? Time alone will tell."

MEDICAL TRUTHS IN THE LAY PRESS

An editor of a lay paper in Iowa, in advancing reasons why organized medicine should engage in health education through the medium of the lay press, had the following to say concerning advertising that should be off-set by the truth. Said the editor, "Here I have a chiropractor's advertisement about curing paralysis. Certainly the medical profession must do something to counteract such things as this. You can easily realize that this one case is not the harm. The worst of it is the hope that it holds to thousands of other paralytics who are willing to spend their last cent in a vain endeavor to procure health. If the medical profession does not give the truth to the people, then doubt and suspicion will creep, and is creeping into the layman's mind over this unusual modern silence. Do you suppose the explanation that advertising is unethical is sufficient?" The editor then goes on to say that he is willing to cooperate with the medical profession if it will pre-

sent lay readers with health facts which they need and want. However, he insists that it shall not be an individual effort but the concerted effort of the entire medical society if it is to be a success.

In Indiana we have our Bureau of Publicity that is doing a wonderful work in telling the truth about health subjects, and weekly releases are accepted very generally by the lay press of the state. However, we often have felt that perhaps those articles sent out by the Bureau of Publicity were not forceful enough, in that they do not counteract the vicious teaching of the quacks and medical pretenders. We believe that the lay press in general would be willing to help us to counteract the effect of the illogical, untrue and dangerous teaching of some of the pseudo-medical cults. For instance, recently an Indiana chiropractor advertised boldly that he had restored the sight to a man blind with a cataract, and very naturally that sort of an advertisement brought many incurably blind to his office where they were given hope of restoration of sight probably upon the payment of a substantial fee for the service. The natural supposition is that newspaper editors ought to refuse advertising of that sort, but they do not, so the best way to offset such vicious and misleading advertising is to brand it publicly for what it really is, deception. In reality in our endeavors to protect the people from such misrepresentation and fraud we have stuck a little too close to the ethical rules when as a matter of fact a little militant teaching on our part would accomplish a great deal of good in protecting the people.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

We want to remind our readers that we want and need their assistance in making THE JOURNAL everything that it should be in the way of a disseminator of scientific information, society proceedings, news notes, personals and editorials. We desire to have condensed reports of all society meetings, the same to be furnished by medical society secretaries, and we are especially anxious to know about the doings of Indiana physicians and we hope they will not be bashful in giving us personal news.

A PATIENT suffering from an attack of quinsy told the attending physician that he had had his tonsils out four different times and was loath to believe that he still had good sized pieces of tonsil high in the tonsillar space on each side. He complained that his condition did not speak well for the ability of the medical profession, but was reminded that his condition did not speak well for his own judgment in the selection of physicians. Almost every one is whacking at tonsils, so it is not much wonder that a lot of bad surgery is encountered. That, however, does not discredit the value of a properly done tonsillectomy.

WE know a physician who has more cases of endocrine disturbance than all the other physicians in Indiana put together. We know another physician who has an unusual number of cases of acetone poisoning; still another has gone daffy on the subject of intestinal autointoxication. These fellows remind us of the people with unstable nervous systems who for years were forever having something the matter though always looking well and able to meet the demands of social or pleasure exactions. They finally adopt Christian Science, and although never better than they were before, they give credit to Christian Science for perfect health. However, a certain number of people must go off on a tangent, and some physicians will play true to form in that respect.

DR. MORRIS FISHBEIN, editor of the *Jour. of the Amer. Med. Assoc.* in an article in the *Scientific American*, says that there is real danger of lead poisoning from indelible pencils, as several instances in which portions of indelible pencils have been forced into the human body through accident or otherwise have produced serious symptoms. In one case severe intestinal trouble with jaundice was produced, in addition to marked swelling of the hands, and pain and disturbance in the kidneys. An operation for the removal of the indelible material has resulted in eventual recovery. When portions of the indelible pencil get into the eye there may be severe inflammation and secondary infection, and sometimes even destruction of the eye. For these reasons it is absolutely important to avoid getting fragments of indelible pencil into the eye while it is being sharpened.

In defense of an argument on the part of welfare workers that physicians ought to be willing to render a lot of charity medical service, the argument has been advanced that the grocer in furnishing food for the poor is furnishing a commodity for which he has had to pay his good money, or, in other words, he has furnished a part of his capital in trade, whereas the doctor is furnishing only time. In the name of all that is good and holy, can they say that a doctor's education and training, which has cost him thousands of dollars, is not his stock in trade, and that he is

not giving of his stock in trade when he renders services to the poor and is he not as much entitled to a return upon his investment as is the grocer or any other merchant? It is high time that physicians should combat all of these absurd and inconsistent notions concerning the value of medical services which have cost the physician a large amount of money and a great deal of time.

THE medical profession is being criticized in the lay press for accomplishing little or nothing in the control and cure of cancer, irrespective of the enormous sums that have been spent in laboratory research and experimental work by physicians and surgeons all over the world. As a matter of fact, as pointed out by the *Illinois Medical Journal*, there is a greater interest in the cancer situation than ever before, and it is very probable that many cases now diagnosed as cancer had been diagnosed previously as a benign manifestation and spoken of as innocuous by both practitioner and patient. Undoubtedly until the last decade many a death from cancer was set down otherwise on the death certificate, and in far too many instances erroneously diagnosed, especially in obscure cases. It is justly admitted that about thirty percent of all cancers are curable in the early stages. Surgeons annually report an increasing number of checked or cured cases of cancer. Meanwhile there are renewed efforts in research work, and we confidently believe that in a very short time there will be a solution of the problem.

THAT pungent writer, Dr. Thurman B. Rice, of Indianapolis, who often contributes to THE JOURNAL and other publications, in commenting on the ignorance and inconsistency of Indiana people in health matters, has the following to say in the Bulletin of the Indiana State Board of Health for November, 1928, concerning disease prevention: "While diphtheria was rampant among our children we have seen a legislature appropriate a large sum of money to protect the sacred cow from foot and mouth disease. On the same day that another legislature turned down a bill providing for the maintenance of a hospital for the mothers of the state, they passed an appropriation for an equal amount to protect the homely hen from disease. The sacred right of the dog to go where and do what he pleases makes it impossible to stop the epidemic of rabies that has been raging for several years. Immunization of hogs against disease is more popular than the immunization of children, and tested cattle were easier found than tested children, and yet we send missionaries to India to teach the poor heathens not to worship animals. How long, Mother Indiana, are you content to be Mother India?"

It makes us smile every time we see a "Hospital Zone" sign, asking for *quiet*, when as a matter of fact the hospital in the interest of which the signs are placed usually faces a street car line where clanging street cars are going past every minute or so, and to top the whole thing off that very hospital uses little effort to suppress unnecessary noises within the hospital itself, as evidenced by the almost incessant noise from phonographs, radios, clanging dishes, laughing nurses, etc. In erecting hospitals some attention should be given to the selection of a location that not only is away from extraneous noises but is apt to continue to be free from such objections. Unfortunately many hospitals have suffered from the natural growth in their vicinity, with the development of street car lines and other modes of traffic, all of which add to extraneous noise. However, it is possible to enforce certain restrictions, particularly as to the unnecessary clanging of street car gongs in front of the hospital, and tooting automobile horns, as it also is entirely possible to eliminate many of the noises within the hospital itself. Unquestionably patients will do better if there is quiet, and every means should be taken to suppress unnecessary noise.

It is a well known fact that hay-fever and asthma may be due to any one or several protein or other substances that when taken through the air or food channels act as irritants. As indicating the variety of substances that may be the cause of asthma, E. T. Brown in the *Journal of the A. M. A.* for February 9, 1929, reports a case of perennial hay fever due to parrot feathers. The patient had ninety-seven cutaneous tests with food, animal, epidermal, stock bacterial and pollen proteins, all of which were completely negative, with the exception of a positive reaction to parrot feathers. It was discovered that the patient had a pet parrot, of which he was very fond, and the onset of the hay fever corresponded with the ownership of the parrot, and periods of relief from the asthmatic attacks corresponded with the period when the patient was away from the parrot. Two days after he had parted with his feathered friend the patient was free from all symptoms of hay fever and has remained entirely well up to the present time, a period of four years. The case shows the necessity of taking a careful history and exhausting every resource to determine the nature of the causative factor. Parrots, birds of every kind, feather pillows, and such pets as cats and dogs, should be under suspicion when studying cases of hay fever and asthma.

It is reported in the *Journal of the A. M. A.* that a Michigan farmer paid \$6,350 to men posing as eye specialists for treatment of his daughter's eyes at his home. The specialists who visited his farm, August 14, 1928, recommended an immediate cataract operation on his daughter's eye,

which they offered to perform on the spot for \$1,850. Another specialist returned later to treat the case, and induced the family to purchase a machine to guarantee saving the sight, for which the farmer states that he paid \$4,500 in cash.

Ye gods! We thought that all of the farmer suckers resided in Indiana, but we never yet have discovered a farmer who was foolish enough to give up \$6,000 for any kind of treatment, and of course a real honest-to-goodness competent Indiana physician would have a heck of a time in getting even \$600 out of any farmer for the treatment of anything, unless it were to drive cholera from a drove of hogs, let alone paying \$6,000 for it. We often have wondered just what the knack is in extracting these fabulous fees that we sometimes hear have been paid by gullible farmers to medical imposters. Some of us would be tickled pink to be able to get even a quarter of these fabulous fees that the quacks extract from victims. We even would be inclined to step over the traces a little and guarantee some results from the service!

In discussing the public relations of the county medical society, Dr. A. W. Rogers, in the *Wisconsin Medical Journal* for July, 1928, had some pertinent things to say concerning the county nurse. He said in part: "I have been attending our county medical society meetings for nearly thirty years, and I never have met a county nurse at one of the meetings, but I have heard a lot of fellows get up on their feet and cuss them. That, I do not believe is fair. There is no question but that sometimes the county nurses are ill-advised in their activities. I have heard people who are not county nurses who had the same qualifications. There is no question but what the county nurse is a very valuable adjunct to the medical profession, but it seems to me more sportsmanlike to criticize that county nurse in her presence than when she is not present. Therefore, I raise the question, why should not the county nurse appear at the meetings of the county medical society, if not regularly at least occasionally? She certainly is an individual to confer with. She is the one who in her wanderings can teach the public many things that we want taught and yet we are not in position to reach the public that way. The county nurse can teach the people the necessity of prophylaxis against diphtheria and scarlet fever, and direct a great many patients along those lines which need care and attention."

PHYSICIANS often receive letters from manufacturers of various products, some of which have no connections with the practice of medicine, asking for an opinion as to the merits of the products. It is a cheap way of securing an opinion that may be valuable in the way of advertising. As the bulletin of the Toledo Academy of Medicine says, "The point is that the medical profes-

sion always has been donating to the world much of its time, knowledge and work to improve the health of the human race. This generosity is being abused. The time has come to prevent the commercial world from exploiting physicians for selfish gain. Questionnaires have become so prevalent and bothersome that several hours a month would be necessary to answer all received. The waste basket may be the quickest and easiest way to save one's valuable time. This, however, does not eliminate the follow-up letters. The second method of handling these questionnaires is recommended. Answer the questionnaire with a letter that is short and to the point, and it is suggested that the answer should be something like the following: "I have just received your letter requesting my opinion on a medical subject. I shall be pleased to answer the questionnaire and give you the benefit of my specialized and expert opinion. My ordinary fee in these matters, however, is ten dollars. Please advise that this agreement is understood and satisfactory to you. Very truly yours," M. D."

HERE you have it, right from the fountain head of knowledge, the *Journal of the American Association for Medico-Physical Research* which says that "cancer is a hyperalkaline autointoxication," and that "the tumor is a local manifestation of this general constitutional condition." Furthermore, from this fountain-head of wisdom comes the following choice bit of advice to sufferers: "First, never permit a surgeon to operate upon you for cancer. He jeopardizes your life for the money and calls it ethical. Second, never let a physician use x-ray on you for cancer. It is extremely dangerous. Cancer patients who are the victims of x-ray die a horrible death. Third, never let a physician use radium on you for cancer. It is simply deadly to the cancer patient." The writer of the article in question says that he has done more cancer research work than any other man in the world. He says, "By modern methods all cancers can be cured." Concerning the use of x-ray in the treatment of cancer the author says that "such treatment is electrocution." Radium is condemned as being more powerful than x-ray, and that "it will kill just as surely as an x-ray machine. Either kills by the most horrible and indescribable death," which, according to the writer, is called murder, for "such patients are killed regularly and ethically." The author of this choice bit of invective styles himself, E. M. Perdue, A. M., M. D., D. Ph., of Kansas City, Mo. He neglected to add all of his degrees, for he left out "P. B. A." which signifies "pale blue ass."

Whether the epidemic of respiratory disease going over the country this winter has been influenza or not is a debatable question. What we do know is that the epidemic, though not attended

with the mortality that occurred during the influenza epidemic of a few years ago, has caused many deaths, and in the majority of cases that recovered there followed sequellae that have persisted for long periods of time and sometimes become chronic. One thing is certain, and that is that the overpowering depression that sometimes is persistent for weeks has been out of all proportion to the symptoms of the disease. Many patients have paid a very severe penalty for not paying more attention to the marked depression and its effect upon heart muscles. Even physicians sometimes have failed in their duty to patients by not recognizing the dangers of the depression following the so-called influenza and have failed to insist upon appropriate rest and freedom from work until recuperation is well established. Perhaps the unusual and prolonged depression that has followed the respiratory infections of this year alone have justified the diagnosis of influenza in those cases where the diagnosis seemed questionable in the beginning. At all events the respiratory troubles that have swept the country this winter have been severe enough in symptoms and sequellae to make us have a very wholesome respect for the trouble. It is unfortunate that we have no real scientific diagnosis of the diseases now prevalent, but it is hoped that the research work going on in this connection eventually will bear fruit.

If physicians individually and collectively decrease their support of concerns that are manufacturing and marketing pharmaceuticals of questionable merit they will stand better as representatives of a profession that tries to be consistent and logical in its conclusions and practices. The Council on Pharmacy and Chemistry of the A. M. A. is the clearing house for pharmaceuticals, particularly those rated as new and non-official, or perhaps we should say proprietary remedies. The Council is conducted by a large number of physicians and chemists of the highest standing and its findings are worthy of respect. It is absolutely impossible for the individual physician to conduct such a thorough and painstaking examination of the qualities and effects of pharmaceutical specialties as is conducted by the Council, and in consequence the individual physician will be wise if he follows the Council's findings and not depend upon his own perverted knowledge or the recommendations of the manufacturer who may be interested in the commercial end of the proposition and who either intentionally or otherwise offers suggestions and advice that is not trustworthy. For the most part the state medical journals are refusing to accept advertising of any new and nonofficial remedies that have not received the approval of the Council on Pharmacy and Chemistry. Bulletins of county medical societies should do likewise. In the final analysis this righteous stand on the part of pub-

lications owned by the profession, which is advocated and supported by the profession as a whole, will not accomplish its ultimate aim unless the individual physicians give their support.

WE take the liberty of quoting the *Illinois Medical Journal* in recommendation of topics that physicians may use in talking to lay groups concerning various phases of health. The list is as follows:

MEN'S ORGANIZATIONS

The Economics of Good Health.
Fair, Fat and Forty.
Man and the Microbe.
The Changing World.
How Are You?
What's New in the World of Medicine?
Longer Life and Greater Efficiency.
Teamwork with the Community.
Conservation of Health.
What's Your Score?
How Old Are You

WOMEN'S ORGANIZATIONS

After the Forties, What?
Health Inventories for Club Women.
Social Assets.
Fat and Thin.
How Are You?
Facing the Forties.
Value of Good Health to the Business Woman.
Conservation of Health.
Romance of Medicine.
Our Responsibility for Individual and Community Health.

Teamwork with the Community.
Now Your Child Must Go to School.
Dodging Disease.

Foes of Childhood.
Physical Handicaps.
Cold Weather Perils.
The Child and the Community.

Understanding the Adolescent.
Sanitation—Home, School and Community.

HIGH SCHOOL ASSEMBLIES OR OTHER GROUPS OF BOYS AND GIRLS

A Treasure Chest.
Health Heroes.
"Beauty and the Beast."
On Board the Steamship Health.
Romance of Modern Medicine.
Good Health and Mental Ability.
Good Health and Physical Efficiency.
Men and Microbes.
Traffic Light.
Health and Personal Appearance.
Your Length of Life.

THE American public seems to have gone crazy on the diet proposition, though women are the worst offenders in listening to every Tom, Dick and Harry who has something to say concerning reduction in weight in order to improve the physical appearance. As one of our advertisers says, "For the past few years a mania for reducing diets has swept this country. The craze for a boyish figure has permanently injured the health of many thousands of girls and women. So serious has it become that the medical profession is uttering a warning. A committee of eminent physicians, members of the American Medical Association, has issued numerous warnings. They have

joined with Dr. Morris Fishbein, editor of the *Journal of the A. M. A.*, in an effort to tell the public of the danger of starvation diet. Sugar, perhaps more than any other product, has suffered from the craze for dieting. Publicity from many sources has made sugar and sweets shunned by the seekers of boyish figures. Many of the statements regarding sugar have not been founded on facts. Its high calory content has given a semi-scientific basis for popular writers for listing sugars and sweets as the main fattening items of the diets. In answering this impression, Dr. Landro E. Taylor, one of the outstanding diet authorities, says in an article in *Hygeia*, "The attempt has been made to associate this overweight with the present high sugar intake of the country. This is an unsound inference. The state of being overweight is the result of the excess in calories in total, and not of an excess in calories of a certain source. The average American consumes eighteen pounds of sugar per annum *less* than the average Australian, and fifteen pounds less than the average New Zealander. An effort is being put forth to tell the public the truth about dieting in general and sugar in particular. This is absolutely necessary in the interests of fairness and justice and is not wholly an effort to help the standing of certain commercial interests. In fact, much harm has been done by a sort of vicious campaign in printing unsound and unfair propaganda concerning dieting. In reality the public should know the truth."

THAT the chemical elements in our bodies make us bright or dull, popular or lonely, is an argument advanced by Elmer Thompson Levertton in the December number of the *Welfare Magazine*. The conclusions seem rather far-fetched, but are interesting. The author says that an individual's personality, his tendency to mental strength and weakness, may be reduced almost to the precision of a mathematical formula by a study of the chemical content of his body. Of the sixteen chemicals which scientists declare make up the human body a certain one or a certain set is always predominant. The author then says that it invariably follows that the individual in question manifests traits in accord with his chemical nature. For instance, if calcium is in the lead the man is of a positive nature; if carbon is in the lead you have a very negative individual. A child fed excessively on carbon foods grows up with no will power and spends his life like a piece of drift wood, helpless to direct his own destiny. Phosphorus builds intellectual power and efficiency. The phosphorus lady is beautiful, and has a very artistic temperament, but she also has outbursts of temper when the sulphur explodes. Silicon goes to produce optimism. Potassium produces a muscular and athletic body. He has a ready smile and is very approachable. He makes friends easily and encounters a minimum

of friction in his contact with people. He is exceedingly talented and broad-minded. The sodium type is opposite the calcium type—he is always in action. The oxygen type is a very good affinity for the sodium type; the two form a fortuitous partnership both in business and matrimony. He has large nostrils because he takes in so much oxygen. He has an expression of innocence but is not innocent by any means. He loves to talk and is always talking. He enjoys eating and drinking and does both to excess. He is our greatest and most successful promoter and organizer. He always is building up and tearing down. He is a man of power and visualizes opportunities bigger than they are. The hydrogen type soon becomes nothing but bags of water-fat, and he weighs more than people of any other type. The fat man or woman of the circus who weighs four or five hundred pounds is the hydrogen type. He drinks enormous quantities of water and liquids of all kinds. He is slow and awkward, lacks endurance, as well as initiative. The carbon type likes sweets and starches. He is nervous and timid, undecided and unsteady. The brain is like mush or sand and cannot retain an impression. He cannot read or study. When older he gets sleepy and very dull. The nitrogen type has aristocratic bearing and is egotistical. He never shows his feelings or his personal mental reaction. He is generally controlled and poised and excludes or rejects the thing not to his liking but always in a diplomatic manner. The phosphorus type is a purely intellectual type. He is all mind and little body. The brain and the nervous system dominates the personality. He is an idealist and lives in his imagination. He has wonderful ideas but never has the physical strength to carry them out. He is short-lived, rarely living beyond the age of thirty. He lacks executive power. He is interested in the new, the sensational, the imaginative and the idealistic.

Thus you have a dissertation on chemical personalities, and by inference it is supposed that you can change your personality by changing the intake of chemical substances. Can it be that we will have a new pseudo-medical sect that will attempt to change personalities by appropriate treatment and make a comfortable living by doing it?

“One of the things that the medical profession is called on to do, under the guise and perhaps urged on by the sophistry of altruism, is the doing of public health work free. The medical profession, as you know, is frequently called on to do public health work without any compensation. That does not mean that the medical profession should not step in and take control of health matters in times of emergency such as arise in severe floods or in tornadoes or in any other emergency that calls for the exercise of altruistic work just the same as any other person does by being the

only one, perhaps, competent to do certain lines of work. That it should continue to do and it has never been found wanting. In addition to the duty of public health service, the profession is called on to do public school inspection work. That is not an individual work but entirely a group work and the medical profession should not be called on to do this work without proper compensation. Again it is often called on to do infant welfare work. You hear of infant welfare clinics being established all over the country. That is also a group altruistic work and a work that the medical profession volunteers to do without compensation, but it has been found that in doing this free group altruistic work, the medical profession is being imposed on constantly more and more by those who are perfectly able to pay. That is a group altruistic work that the profession should not be called on to do without compensation. Again there is vaccination. The administration of toxin antitoxin in diphtheria is another group service which the profession is called on to do and I do not mean during times of emergency because in any emergency the medical profession is always ready to do more than its duty.

“In addition to all group altruistic work, I should like to refer to the work that the profession is called on to do for the benefit of corporations and institutions, which is purely to the financial benefit of the corporation or the organization and not strictly a humane or charitable work on the part of the physician. In this class, I may mention the work done in health examinations for the benefit of insurance companies that desire to have their policy holders examined to determine their physical fitness. The medical profession has been induced, I think I might better say seduced, into doing this work at a very nominal price which is paid to it by the company, organized as a stock company for profit, and the information that the physician is sending to this corporation the corporation takes and resells to the consumer, the person examined, at a profit of four or five hundred percent. That is one of the classes of work that the profession is doing with the idea that it is doing altruistic work. That is what the corporation tries to make the profession believe; namely, that it is doing a benefit to humanity in furnishing insurance companies with reports of physician's findings and diagnoses of his patients. The physician may have attended a patient or operated on a patient who subsequently applies for insurance. The insurance company writes the physician and asks as a favor to former patient would he kindly send a report of his findings, or of his operation at the time or what the physical condition is at present and whether he thinks the patient a good insurance risk. In other words, the insurance company is getting a medical examination out of the doctor free under the

plea that the physician is doing some favor to a former patient. That is an imposition on the profession. It is not an altruistic work nor is it a charitable work to the individual but it is purely a gratuitous work for a corporation that receives the financial benefit.

"These, gentlemen, are some of the economic conditions that the profession is laboring under today which I think is entirely up to the profession to correct. The humane feature of the profession there is never any question about, and there never will be. The profession will always be humane and humaneness will be its most noble attribute. But what I should like to impress on you is that there is a great difference between humaneness and altruism as altruism has come to mean today. I wish to leave with you the definition of these terms and I hope that you will work out the problems and see clearly the distinction and difference between humaneness and altruism as it is termed today."—M. L. HARRIS, M.D., President-elect of the American Medical Association; excerpt of address before the Wisconsin secretaries and editors' conference in Chicago, November 15, 1928, and published in *Wisconsin Medical Journal*, January, 1929.

DEATHS

S. A. EDMANDS, M. D., of Goshen, died in Bradenton, Florida, February 17. Dr. Edmands graduated from Rush Medical College, Chicago, in 1891.

ARTHUR W. BLOXSOME, M. D., of Pennville, died March 9, aged 58 years. Dr. Bloxsome graduated from the Medical College of Indiana, Indianapolis, in 1897.

WILLIAM A. HARDY, M. D., (colored), of Gary, died February 21, aged forty-four years. He graduated from the Meharry Medical College, Nashville, in 1914.

JOHNSON P. STROUSE, M. D., of Garrett, died February 24, aged seventy years. Dr. Strouse graduated from the Cleveland College of Physicians and Surgeons in 1897.

W. B. ASHBY, M. D., of Oakland City, died March 9, aged fifty years. Dr. Ashby was a member of the Gibson County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Kentucky University Medical Department, Louisville, in 1905.

MELVIN T. BRUMBAUGH, M. D., of Foraker, died February 22, aged seventy years. Dr. Brumbaugh was a member of the Elkhart County Medical Society, the Indiana State Medical Association and the American Medical Association.

He graduated from the Curtis Physio-Medical Institute, Marion, Indiana, in 1897.

WILLIAM RILEY SPARKS, M. D., of Pendleton, died March 1, aged 46 years. Dr. Sparks was a member of the Madison County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Indiana University School of Medicine, Bloomington-Indianapolis in 1908.

NEWS NOTES AND PERSONALS

DR. AND MRS. R. W. CAMPBELL, of Indianapolis, celebrated the fiftieth anniversary of their wedding, March 11th.

DR. JOSEPH E. WIER has been selected as the anesthetist for Walker Hospital, Evansville, succeeding the late Dr. Dalton Wilson.

FOLLOWING the death of Mr. Thomas A. DeVilbiss of Toledo, Mr. Allen Cutchess has been made president of the DeVilbiss Company.

MEMBERS of the Henry County Medical Society held a meeting February 26 at New Castle. Dr. Leon Zerfas, of Indianapolis, addressed the meeting.

AT the second annual meeting of the Indiana Roentgen Society, Indianapolis, February 22, Dr. Carl S. Oakman, of Muncie, was made president-elect.

AT the March fifth meeting of the Muncie Academy of Medicine, Dr. Louis J. Hirschman, of Detroit, presented a paper on "Pitfalls in the Diagnosis of Colitis."

THE Jasper-Newton County Medical Society held a meeting at Rensselaer, March 1. Dr. H. O. Mertz, of Indianapolis, presented a paper on "Genito-Urinary Diseases."

DR. R. F. BRAUNLIN, formerly of Huntington, is now associated with Dr. W. H. Braunlin, of Marion, Indiana, in the practice of diseases of the eye, ear, nose and throat.

AT the March 19th banquet meeting of the Fort Wayne Medical Society, Dr. Malcolm L. Harris, of Chicago, presented a paper on "Economic Value of Medical Service."

THE members of the Laporte County Medical Society held a meeting at Laporte, February 21. Dr. F. H. House, of Westville, and Dr. J. R. Phillips, of Michigan City, presented papers.

DR. LESLIE C. SAMMONS, of Shelbyville, was named governor of the Twentieth District, com-

prising Rotary Clubs of Indiana, of Rotary Internationale, at the annual state conference held in Terre Haute in February.

MU chapter of Phi Chi, national medical fraternity, observed its 27th Founders' Day anniversary at the Lincoln Hotel, Indianapolis, February 23, with initiation of a class of thirteen candidates.

R. A. SOLOMON, M. D., of Indianapolis, has been elected president of the state alumni association of Phi Beta Pi. Dr. E. O. Asher, of New Augusta, is vice-president and Dr. R. O. Geider, of Indianapolis, secretary.

THE regular monthly seminar of the Indiana University School of Medicine was held March 22, in the Auditorium of the Medical School Building. Cases were presented by Drs. Garceau, Bedwell, Clevenger, and Richardson; papers were presented by Drs. Moenkhaus, Rhamy and Bailey.

THE March meeting of the Madison County Medical Society was held March 19th, in the dining room of the Y. M. C. A. at Anderson. Dr. P. E. McCown, of Indianapolis, addressed the meeting, his subject being "Hematuria and its Significance, Medical and Surgical." The Woman's Auxiliary of the Society held a meeting following the dinner.

WILLIAM R. MOFFITT, of West Lafayette, recently completed fifty years of service as a physician in that locality. In honoring Dr. Moffitt, the members of the Tippecanoe County Medical Society presented to him a chimes clock, bearing a silver plate upon which was inscribed, "Commemorating fifty years of medical service.—Compliments of the Tippecanoe County Medical Society."

THE regular monthly clinic program was held at the Welborn Hospital Clinic, Wednesday, February 20th, at 8:00 p. m. The following papers were presented: Report of a Case of Pregnancy Following Lipiodol Inflation of the Fallopian Tubes, by Dr. J. F. Wynn; Appendicitis in Children, by Dr. W. R. Davidson; Infant Feeding, by Dr. E. L. Boyd; Report of a Case of Spontaneous Pneumothorax, by Dr. Keith T. Meyer; Report of an Interesting Urological Case, by Dr. J. W. Visser.

THOSE physicians who will attend the meeting of the American Medical Association in Portland will be interested in knowing that arrangements have been made for those who go on the Indiana special train (Chicago and Northwestern Railway) to play golf at Denver the morning of arrival, at Salt Lake City the afternoon of arrival

and at Tacoma any time during the day of July 13th. Arrangements probably will be made for golf at Seattle and at Jasper National Park.

THE U. S. Civil Service Commission announces open competitive examination for senior bacteriologist. Applications must be on file with the Civil Service Commission at Washington, D. C., not later than April 24th. Entrance salaries range from \$4,600 to \$5,200 a year. Competitors will not be required to report for examination at any place but will be rated on their education and experience, and writings to be filed by the applicant. Full information may be obtained from the U. S. Civil Service Commission.

THE Northwestern University Medical School, 303 East Chicago Avenue, Chicago, Illinois, desires to obtain volumes of the Transactions of the Indiana State Medical Association to complete their files as follows: first 32nd volumes, 1850 to 1882 with the exception of 1875, 1876, 1879 and 1882; 37th volume, 1886; 46th volume, 1895. If anyone can supply these volumes please write to Ellen L. Stearns, Cataloguer, Northwestern University Medical School Library, 303 East Chicago Avenue, Chicago, Illinois, or send the volumes direct to the Library.

THE Northern Tri-State Medical Association held a meeting at the Academy of Medicine Building, Monroe at 15th Street, Toledo, Ohio, April 9th. Papers were presented by Dr. M. E. Davis, Chicago, Dr. Lowell D. Snorf, Chicago, Dr. Henry W. Meyerding, Rochester, Dr. John B. Deaver, Philadelphia; Dr. Isaac A. Abt, Chicago; Dr. G. Van Amber Brown, Detroit; Dr. Fred C. Cotton, Boston, and Dr. Alfred Adson, Rochester. A banquet was held at the Chamber of Commerce in the evening with Mr. Gus W. Dyer, of Vanderbilt University, as the speaker.

THE New Highland Sanitarium, located at Martinsville, Indiana, sustained a severe fire loss recently. The buildings comprise three units, two wings being new brick buildings, five stories high. The fire broke out in the center occupied by the old sanitarium building, destroying it completely. The windows and interior of the new brick building were badly damaged, loss amounting to \$200,000. Work already has been started to restore both brick buildings which comprise an American plan hotel with sanitarium, baths and medical clinic, and it is hoped to have this in full operation by May first.

THE second annual meeting of the Indiana Roentgen Society was held in Indianapolis, February 22nd. Dr. P. M. Hickey, of the University of Michigan, was the guest of honor, and presented an address on "Lateral Teleoroentgenography of the Chest." Officers for the year 1929

were elected as follows: President-elect, Dr. C. S. Oakman, Muncie; vice-president, Dr. K. T. Meyer, Evansville; secretary-treasurer, Dr. J. N. Collins, Indianapolis. Dr. E. M. Van Buskirk of Fort Wayne was made a member of the executive committee for three years. The next meeting of the Society will be held in June, at Evansville.

THE weekly meeting of the Indianapolis Medical Society was held at the Athenaeum, March 5th, with the program consisting of case reports presented by Drs. W. D. Little, Maurice Kahler, H. S. Leonard, Wm. A. McBride, C. H. McCaskey, J. A. McDonald, E. L. Lingeman, and Carl Habich. The March 26th dinner meeting of the Society was held at the Athenaeum, with Dr. Virgil H. Moon, of Philadelphia, as the guest of honor. The April 2nd meeting of the society was called the "Tuberculosis Meeting" and a program in keeping with the National Campaign for "Early Diagnosis, Early Discovery, Early Recovery" was presented, with illustrated talks made by Dr. E. B. Mumford and Dr. Stephen A. Douglas.

DURING the summer of 1929 short courses beginning June 13th and lasting for six weeks will be offered to the physicians of Indiana by the Indiana University School of Medicine at Indianapolis. The following courses are offered and each will be conducted if the demand shall seem to justify it: Current Problems in Biochemistry; Pharmacology; Medical Ward Visits; Physical Diagnosis; Physical Therapy; General Pathology; Disease Production and Resistance; Nutrition. Complete information concerning these courses may be obtained by writing to the Registrar, Indiana University School of Medicine, Indianapolis, Indiana. Inasmuch as the number of students enrolling in these courses must necessarily be limited, and the giving of the courses is dependent upon the number of applicants for each course, it is urged that those desiring to enroll apply to the Registrar, indicating the course desired.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

E. Bilhuber, Inc.:

Lenigallol.

Ciba Co., Inc.:

Dial-Ciba.

Tablets Dial-Ciba, 0.1 Gm. (1½ grains).

Elixir Dial-Ciba.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

February 7, 1929

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M. D., Chairman; J. A.

MacDonald, M. D., Chas. P. Emerson, M. D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held February 1 read and approved.

The release, "Sinus Trouble," was approved for publication Saturday, February 16.

The following radio releases have been prepared: February 9—"The History of Influenza," February 16—"Our Debt to Animals."

Further discussion took place concerning suggestions to be sent to the Committee on the "Cost of Medical Care."

The following report of medical meeting was received:

November 15—Exchange Club, Muncie, Ind. "The Effect of Modern Business on Heart Disease."

Letter received from Anamoose, North Dakota, in regard to the Indianapolis Cancer Hospital. Letter was referred to the Better Business Bureau with the suggestion that a refund be demanded. Also, a copy of the letter was sent to the Indiana State Board of Medical Registration and Examination.

Letter was received from the secretary of the Indianapolis City Board of Health in regard to an article appearing in *The Indianapolis Times* quoting the secretary of the City Board of Health as follows:

"The idea of community clinics is rather new and an innovation in a way. Unquestionably, the establishment of free community clinics, making available the expert services to all classes, would aid very much in getting a higher percentage of the population to subject themselves to regular physical examinations. The idea of a nominal charge would appeal to the class unable to employ private physicians."

The letter follows:

"To the best of my recollections the clipping in the *Indianapolis Times*, quoting me in regard to community clinics is correct. However, such community clinics as were discussed in this interview were to be established in order to carry out regular physical examinations, thereafter referring a patient to his family physician for the necessary medical supervision and treatment.

"In regard to your question concerning my belief in free clinics please accept the following: I believe in free clinics for the charitable sick of the community. I do not believe in the establishment of clinics for those who are able to pay a nominal fee.

"However, I do believe that it would be a benefit both to physicians and patients and citizens as well, if clinics were established under the supervision of either the Board of Health or physicians, affording the availability to every citizen to receive a thorough physical examination. No treatment of any kind would be administered in such a clinic.

"If a fee was charged it would go to pay the operative cost of the clinics and for the service of the examining physicians.

"Perhaps the same thing can be accomplished through education and publicity, namely in getting a large percentage of the population to subject themselves to regular physical examinations.

"This is just a passing thought and may perhaps have a tinge of state medicine to it. In case it does, please do not consider it seriously because anything in my mind that borders on state medicine is out of the vale of possibility so far as I am personally concerned. Even though I have been in the field of public health work for the past eighteen years, I still have a vivid recollection of some of the cases in my private practice being taken care of by clinics when they should have gone to the family doctor.

"Therefore, state to both your committee on publicity and to Dr. Bulson that I am quite familiar with the chaotic condition in England where state medicine has been established and far be it from me to wish any sit-

uation like that on this community or the profession."

Letter received from the National Food Products Protective Committee.

Clippings from the press of general interest to the medical profession received.

The following bill was approved for payment:

Central Press Clipping Service.....\$10.62

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole February 15, 1929.

WILLIAM N. WISHARD
Chairman
THOMAS A. HENDRICKS
Secretary

BUREAU OF PUBLICITY

March 8, 1929.

Meeting called to order at 4:30 p. m.

Present: J. A. MacDonald, M.D., Chas. P. Emerson, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held February 7th read and approved.

The release, "Spring Tonics and Spring Fever," for publication Saturday, March 23rd, was read and approved.

The following radio releases have been broadcast:

February 23—"Sinus Trouble."

March 2—"Early History of Anesthetics."

March 9—"Spring Tonics and Spring Fever."

Letter received from physician of Clay County in regard to advertisement entitled "Little Chats About Your Health" by a pharmacy in Brazil. The comment of the Bureau upon similar advertisements of an Indianapolis pharmacy was as follows, according to the minutes of the Bureau of November 28, 1927:

"Advertisements entitled 'Little Chats About Health,' appearing in an Indianapolis paper over the signature of an Indianapolis pharmacy came to the notice of the Bureau. The Bureau thinks that these articles already presented in the press are excellent. The importance of consulting one's family physician is constantly stressed in these advertisements. The secretary was authorized to write a letter to this pharmacy stating that these articles had come to the attention of the Bureau and that those already presented in the press seem excellent. The following well illustrates the type of advertisement of the pharmacy mentioned:

"A physician compares people and their food with an automobile motor and its fuel. In hot weather each requires less than in cold as any excess produces heat, which above a certain point is very undesirable.

"Not only will eating less food help to keep you cool, but it will prevent the troubles which associate with excessive waste matter in the body.

"The subject of a proper diet is a very important one to which your physician has given much attention.

"Always consult him about any matter in connection with your health."

The Bureau makes the same comment concerning the copies of the Clay County advertisements which have been received at this office.

Letter received from the secretary of the American Medical Association in answer to a request from the Publicity Bureau in regard to pseudo medical broadcasting. The letter in part follows:

"The American Medical Association was represented at a meeting held in Chicago some time ago at which representatives of the Better Business Bureaus and of broadcasting stations themselves were present. This meeting was called for the purpose of initiating the movement which it is hoped will instigate action that will prevent the promiscuous use

of broadcasting stations by fakes, quacks and frauds of all sorts.

"Until some official action is taken by a legally constituted agency having authority over broadcasting, I know of nothing more that can be done that has not already been done to clear up this situation.

"The facilities of the radio chains are for sale and it seems that under the law.....has as much right to broadcast as anyone else so long as he can afford to pay the bills. We expect to take advantage of every opportunity that comes to us to protest against the use of the radio for undesirable purposes."

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole March 22, 1929.

WILLIAM N. WISHARD,
Chairman.
THOMAS A. HENDRICKS,
Secretary.

VANDERBURGH COUNTY MEDICAL SOCIETY

The February meeting of the Vanderburgh County Medical Society was held at the Y. W. C. A., Tuesday evening, February 12th, at 8:00 o'clock.

Dr. Owsley Grant, of Louisville, Kentucky, who was to present a paper on "Urology," was ill and unable to be present. The following program was presented by the local urologists:

Symposium on Stones in the Genito-urinary Tract: Kidney and Ureteral Stones, by Dr. W. R. Hewins; Bladder Stones, by Dr. A. E. Newman; Urethral Stones, by Dr. Wm. S. Ehrich; Report of a Case of Traumatic Rupture of the Urethra, by Dr. R. R. Acre; and Trichomonas Infection of the Urinary Bladder, by Dr. J. W. Visser.

Dr. Wyatt, of Dallas, Texas, secured the endorsement of the society in his plan for the erection of a medical arts building in the city of Evansville.

The Vanderburgh County Medical Society passed a resolution opposing the bill before the state legislature for the placing of the Boehne Tuberculosis Hospital under state control. The secretary of the society was instructed to write the state legislators from Vanderburgh County of their resolution.

The Professional Business Bureau has been incorporated for \$5,000. Drs. Wallace Dyer, M. Ravdin, and W. E. McCool signed the papers of incorporation. A manager and a bookkeeper have been secured and an office, in the Rookery Building, has been leased. Fifteen hundred dollars have already been secured by the selling of stock certificates to the local physicians and dentists.

KEITH T. MEYER, M.D.,
Secretary.

LAKE COUNTY MEDICAL SOCIETY

The Lake County Medical Society met in St. Margaret's Hospital, Hammond, Thursday evening, March 14, 1929. Applications of Drs. W. A. Hornady, of Hammond, and G. L. Karras, of Gary, were presented for ballot, these gentlemen being duly elected.

The program of the evening was presented by local staff members, this being the first of a series of hospital staff meetings in the four major hospitals of the county. The younger men of the staff were assigned this duty and acquitted themselves most admirably; in fact, the program is generally conceded to be the best in many years.

Dr. J. C. Carver presented his personal experience in the use of "Gwathmey Synergistic Anesthesia in Obstetrics." He reported its use in a series of twenty-one cases. Full details as to technique and the general results were presented. Dr. Carver is of the opinion that this method has a very definite place in primiparas.

Dr. H. W. Detrick discussed "Some Unusual Kidney Cases." He gave in detail his experiences with two

cases of gonococcus infection of the kidney. He also reviewed the literature on this subject.

Dr. N. K. Forster presented a discussion of "Superfetation," reviewing the literature and reporting a very interesting case, which came to operation via the Cesarean method.

"The Treatment of Cicatricial Lesions of the Stomach and Pylorus," was the subject chosen by Dr. E. S. Jones. He reported a series of cases, showing many x-rays and presenting two of his patients, in person.

Dr. C. M. McVey discussed "Abdominal Carcinomatosis," giving an intimate history of a case that recently came under his observation.

Meeting adjourned.

Respectfully submitted,
E.M.SHANKLIN, M. D.
Secretary

ST. JOSEPH COUNTY MEDICAL SOCIETY

St. Joseph County Medical Society on February 20, 1929 were guests of the St. Joseph Valley Section of the American Chemical Society at Notre Dame University. Dinner for seventy-five was served at 6:30 in the faculty room of the new dining hall.

Dr. E. E. Kendall, of the Mayo Clinic, gave a paper on "Recent Studies in Thyroid." The first part of the paper was devoted to the history of and chemical researches necessary to the extraction of thyroxin from the thyroid, while the latter part gave the application and results obtained from the administration of thyroxin to selected patients at the Mayo Clinic.

The paper was illustrated with chemical formulas and pictures of patients before and after treatment.

Dr. Kendall stressed the point of the length of time from first discovery of thyroxin to its successful application in medicine and the present necessity for a closer working together of chemists and physicians.

The paper was discussed by several chemists and physicians.

The regular meeting of the St. Joseph County Medical Society was held February 26, 1929, at the Public Library with Dr. Huffman, President, in the chair.

Dr. D. A. Bickel gave the paper—"The Treatment of Gonorrhoea of the Internal Female Genitalia."

The Society voted to have the paper submitted to THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION for publication in its entirety.

The paper was discussed by Doctors M. W. Lyon, Jr., Hoffman and Sullivan.

At the regular meeting, March 5, 1929, of the St. Joseph County Medical Society, Dr. K. T. Knode gave a brief review of the various biological products used in the immunization and treatment of scarlet fever, measles, erysipelas, pertussis, tuberculosis, diphtheria, poliomyelitis, and smallpox. Discussion was by Doctors Miller and Bosenbury.

Dr. L. E. Fisher showed a series of well prepared and well chosen lantern slides, illustrating lesions of the esophagus and the stomach as seen by the use of roentgen ray and barium meals.

At the monthly dinner meeting of the St. Joseph County Medical Society, held March 13, 1929, at the Oliver Hotel, motion pictures produced by Dr. De Lee were shown by Dr. M. Edward Davis, of the Chicago Lying-in Hospital. Dr Davis gave an interesting account of the first attempt of motion pictures in obstetrical work on 16 mm. size films during 1927-28 with such success that in 1928 pictures were made on a larger scale in a larger studio by a good operator for teaching and lecturing.

The pictures given were Forceps Delivery; Episiotomy and Repair; Asphyxia in the Newborn, stressing the proper and improper methods of resuscitation. After

each picture time was given for discussion of it and questions were answered by Dr. Davis. Following the pictures a general discussion on problems of obstetrics took place.

Many out of town physicians were present.

MARTHA BREWER LYON
Assistant Secretary and Treasurer

WOMAN'S AUXILIARY OF THE DELAWARE-BLACKFORD COUNTY MEDICAL SOCIETY

March 11, 1929

Our Auxiliary was organized April 20, 1928, at the home of Mrs. Clay Ball, by Mrs. I. N. Trent, who had been appointed Councilor of the eighth Indiana district.

The nominating committee consisted of Mrs. I. N. Trent, Mrs. Clay Ball and Mrs. U. G. Poland, who submitted the following report:

Mrs. W. C. Moore, President.
Mrs. A. T. Kemper, Vice-President.
Mrs. O. E. Spurgeon, Secretary and Treasurer.

A motion was made by Mrs. C. J. Kirshman and seconded by Mrs. W. J. Malloy to close the nominations and unanimously adopt the report of the committee. The motion was carried. There were no further activities of the Auxiliary until the following December, when at a party of the doctors and their wives a part of the National and State dues were collected.

There have been three meetings since but nothing was done of any special interest with the exception of taking a number of subscriptions for *Hygeia*.

The names and the dues of the members of the Delaware-Blackford County Auxiliary have been sent to Mrs. Kiser, the State secretary.

Our Auxiliary consists of forty-three members who are very well acquainted and enjoy the social side of the Auxiliary.

Respectfully submitted,
MRS. O. E. SPURGEON
Secretary-Treasurer

WOMAN'S AUXILIARY TO THE VANDERBURGH COUNTY MEDICAL SOCIETY

March 9, 1929

The Woman's Auxiliary to the Vanderburgh County Medical Society met at luncheon at the Y. W. C. A. on February 27, 1929, at one o'clock.

The president, Mrs. H. C. Ruddick, called the meeting to order following luncheon, and the Constitution and By-Laws were drawn up and accepted. Mrs. Paul Lynch was named Chairman of the Educational Committee, and Mrs. Robert Viehe Chairman of the Social Committee.

There was a large attendance, and much interest is shown in the Auxiliary.

The next meeting will be held in April.

Respectfully,
MRS. A. E. ALLENBAUGH
Corresponding Sec'y

INDIANA STATE BOARD OF HEALTH
DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, FEBRUARY, 1929

H. W. MC KANE, M. D., DIRECTOR

The morbidity reports during the month from the health officers of the state shows the number of cases for four principal diseases in a weekly comparison as follows:

Febru- ary	Scarlet Fever	Small- pox	Diph- theria	Typhoid Fever
2	195	42	25	3
9	248	109	39	1
16	191	40	25	1
23	227	35	21	2

The foregoing diseases are regarded as the principal communicable diseases because it is a well known fact that they can be prevented and controlled. The four diseases frighten the schools and the general public perhaps, more than all the diseases reported to the Division. If the scientific and simple means that we now have were used for the prevention and control of these diseases, they would be less feared than any of the diseases.

It is true that measles and whooping cough are troublesome and dangerous diseases, but as a rule they are not so regarded by the public. Many thousands of cases of measles and whooping cough have no medical care. More deaths occur from these diseases than from scarlet fever. There were seventy-three deaths from scarlet fever in 1928, two hundred five deaths from measles and whooping cough. We have no means, practically, of preventing or controlling these diseases other than isolation and quarantine. A physician should be called in all cases and he in turn must report the case to the health officer having jurisdiction.

Typhoid fever shows a slight increase over the previous month. Seven cases were reported and five cases in January. Seven and five cases, respectively, are the fewest number of cases reported for these two months in the last seven years. The estimated expectancy for February is sixteen cases, the estimate is based on the experience of the last seven years. Typhoid fever is a late summer and early autumn disease.

Influenza is on the decline since the peak month, December of last year, when 7,502 cases were reported. During the month 620 cases were reported, but last months only 184 cases were reported. Perhaps this is due to the doctors not reporting their cases. During February after the great pandemic of 1918, 5,661 cases were reported. No doubt the disease will decline rapidly as the year advances.

Scarlet fever is the most prevalent of the four communicable disease. The total is 861 cases and 268 cases the previous month. February is the peak month for this disease over the estimated period, seven years. The estimated expectancy was 739 cases. Very little is done in regard to immunization against the disease.

Smallpox is still prevalent. The total is 226 cases and 185 cases last month. Same date last year, 471 cases. Indiana had more smallpox in 1928 than any state in the registration area. Why? Vaccination is the preventive.

Diphtheria is slowly declining, the total for the month is 110 cases and 115 cases last month. Same date the preceding year 141 cases. The estimated expectancy was 238 cases.

The name and number of diseases not mentioned that were reported during the month are as follows: Tuberculosis, 191; Chickenpox, 406; Whooping Cough, 267; Pneumonia, 68; Mumps, 67; Poliomyelitis, one in Floyd County; Meningococcus Meningitis, four; Endamoeba Histolytica, one case in Mishawaka; Ophthalmia Neonatorum, one case in Switzerland county.

During the month, the director spoke to the Parent-Teachers Association in Klondike School west of Lafayette and investigated a scarlet fever incidence in Anderson. He also investigated an outbreak of scarlet fever and measles in the schools of Bartholomew county.

H. W. MCKANE, M. D.
Director

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Further information concerning these books will be supplied on request.

Books received since March 1, 1929:

DIABETES AND ITS TREATMENT. By Frederick M. Allen, M. D., Director of the Psychiatric Institute,

Morristown, New Jersey. One of the National Health Series, edited by the National Health Council. Pocket size, flexible binding. 98 pages. Price thirty cents. Funk and Wagnalls Company, New York and London, 1928.

CARE OF THE MOUTH AND TEETH. By Harvey J. Burkhart, D. D. S., Director, Rochester Dental Dispensary, Rochester, New York. National Health Series edited by the National Health Council. Pocket size, flexible binding. 45 pages. Price thirty cents. Funk and Wagnalls Company, New York and London, 1928.

WHAT EVERY ONE SHOULD KNOW ABOUT EYES. By F. Park Lewis, M. D., F. A. C. S., vice-president, National Society for the Prevention of Blindness. National Health Series, edited by the National Health Council. Pocket size, flexible binding, 70 pages. Price thirty cents. Funk and Wagnalls Company, New York and London, 1928.

PROCTOLOGY. A Treatise on the Malformations, Injuries and Disease of the Rectum, Anus and Pelvic Colon. By Frank C. Yeomans, A. B., M. D., F. A. C. S., professor of Proctology, New York Polyclinic Medical School, etc. 661 pages, with 417 illustrations and 4 color plates. Cloth. D. Appleton and Company, New York and London, 1929.

HANDBOOK OF PHYSIOLOGY. By W. D. Halliburton, M. D., LL. D., F. R. C. P., F. R. S., Emeritus Professor of Physiology, King's College, London, and R. J. S. McDowall, M. B., D. Sc., F. R. C. P., Dean of the Faculty of Medicine and Professor of Physiology, King's College, London. Eighteenth edition. 902 pages, with more than 500 illustrations. Cloth. Price \$4.75. P. Blakiston's Son and Company, Philadelphia, 1929.

TRUTH ABOUT MEDICINES

PROPAGANDA FOR REFORM

JAMES R. KELLY—QUACK.—James R. Kelly of Denver, Colorado, has been operating some mail-order quackery under such imposing trade names as "Great Western Drug Company," "Western Drug Company" and "W. D. Company." His business has been that of selling an alleged cure for sexual impotence and another alleged cure for "rheumatism." He started the business about December, 1926, and his advertising literature was prepared by the Hower Advertising Agency of Denver, which was willing to share in the profits of the fraud and placed the advertising in a number of papers and periodicals. Kelly's nostrum for sexual impotence was known as "Hercules Tablets" with a sideline, "New-Vim (Hi-Pep) Gland Capsules." The Hercules Tablets were found to contain iron carbonate, calcium carbonate, dandelion and strychnine, while the "New-Vim (Hi-Pep) Gland Capsules" were found to contain a mixture of gland substances with considerable thyroid. The rheumatism nostrum "Golden West Rheumatic Treatment" consisted of capsules composed, for all practical purposes, of 5 grains of aspirin, with minute amounts of other drugs; the tablets were purgative, containing, among other things, croton oil and jalap. Kelly's nostrums were prepared by the Cole Chemical Co. of St. Louis, Mo. On January 15, 1929, the Postmaster General issued a fraud order, closing the mails to the Great Western Drug Company, the Western Drug Company and W. D. Company. (*Journal A. M. A.*, February 2, 1929, p. 410.)

THE SNEK-WUN-ON FRAUD.—The device consists of a piece of rubber shaped somewhat like the male sexual organ, the rubber being reinforced by a piece of metal running through its length, which, in turn, is fastened to a rubber ring or collar to be slipped over the male sexual organ. The device is used as an "auxiliary" to the male sexual organ. The device and literature for it were examined by a medical expert, leading to the conclusion that the device would not and could not accomplish the results claimed for it. The post-

office authorities issued a fraud order against the Snek-Wun-On Co. and A. Roginat, sales manager, but, for some reason the order was not extended to the man who was the proprietor of the business—J. G. Deynzer. (*Journal A. M. A.*, February 2, 1929, p. 410.)

RADIO BROADCASTING OF MEDICAL ADVERTISING.—The promoters who travel the borderland between honesty and quackery, raking in the shekels of the unwary, have found in radio broadcasting a glorious accessory for their manipulations. The mutterings of mystics from India and of fortune tellers from France, the claims for hair growers from Austria, for magic horse collars, for radium drinking waters, for antiseptics, cosmetics, influenza and cancer cures, the sexual appeals of rejuvenationists, the mouthings of evangelistic and faith healers, and preposterous dietary schemes come pouring from the loud speakers. At a conference held in Chicago by representatives of the broadcasting stations, the Better Business Bureau, and the American Medical Association, the following resolution was offered: Station directors should keep alive to the fact that all broadcasting is listened to by all members of the family circle and that nothing should be broadcast that is in poor taste. Embarrassing or offensive when heard by all members of the family. The combined action of the radio broadcasting industry and the Better Business Bureaus of the nation should lead promptly to control, indeed, to actual sanitation of medical radio advertising. (*Journal A. M. A.*, February 9, 1929 p. 475.)

AN ANESTHETIC ACCIDENT.—Recently at Evansville, Ind., a tank of nitrous oxide exploded, killing an anesthetist, maiming his attendant, and wrecking several rooms. There was no tank containing ethylene in the room. The nitrous oxide tank was not attached to the machine. It has been assumed that the nitrous oxide tank contained some ethylene. This presumably gained access to the nitrous oxide cylinder when, at some previous time, the tank had been suspended from the yoke of an old time anesthetic machine, so constructed that a mixture of the two gases would occur if the valves were left open. The accident occurred probably as a result of a mixture in the tank of these two gases, notwithstanding the ample warning given years ago regarding the use of ethylene. (*Journal A. M. A.*, February 9, 1929, p. 476.)

LESSER SLIM FIGURE BATH.—During the past few months there has been put on the market a preparation sold under the name of "Lesser Slim Figure Bath" which is described as "The Sensation of Europe," that, by its "mysterious action," will reduce the weight of the fat "regardless of your diet." It comes from Berlin—if one is to believe the advertising—and is the invention of Herr Felix Lesser, who, it is claimed, submitted "his remarkable discovery" to "the eminent Dr. G. Braun on Berlin." The eminent doctor's report is part of the Lesser Slim Figure Bath advertising. An American company has been formed—The Lesser Co., incorporated under the laws of Illinois with John J. Mitchell, a prominent Chicago banker, as treasurer. The *Chicago Tribune* has advertised the preparation although its health editor informed a correspondent that he knew of no substance used in baths which will reduce weight. The Lesser Slim Figure Bath comes in the form of a package of white, highly scented effervescent powder in which there is a large compressed tablet that also effervesces. The instructions are to fill the bath tub with hot water, empty the contents of the package into the tub and stir well, get into the tub and place the tablet "under your back." From its analysis the A. M. A. Chemical Laboratory concludes that a product having essentially the same properties as the bath powder may be prepared by using: corn starch, 7 parts; borax, 1 part; baking soda, 1 part; tartaric acid, 1 part; strongly odoriferous perfume. The Laboratory found from its analysis that a tablet having essentially the

same composition as that of the Lesser tablet may be prepared by using: baking soda, 1 part; table salt, 6 parts; tartaric acid, 3 parts; talc, as binder. Every physician knows that this absurd mixture cannot have the slightest effect in the reduction of weight. (*Journal A. M. A.*, February 9, 1929, p. 492.)

HEPARMONE FOR ECLAMPTIC CONDITIONS.—The Council on Pharmacy and Chemistry publishes a preliminary report on the use of Heparmane in eclamptic conditions. Heparmane is the name applied by Eli Lilly & Co., to an acid alcohol extract of liver. The firm presented details of manufacture of the product and method for its standardization. The preparation has been used experimentally in studies of hypertension, but the firm restricts its recommendations at this time to the use of Heparmane in eclamptic conditions and did not ask for consideration of the experimental work in hypertension. Drs. Miller and Martinez, from the Department of Obstetrics, University of Pittsburgh School of Medicine, read a paper on their use of Heparmane in preeclamptic conditions and eclampsia before the Section on Obstetrics, Gynecology and Abdominal Surgery at the Seventy-Ninth Annual Session of the American Medical Association at Minneapolis, June 14, 1928. The Council examined the evidence presented in this paper and concluded that Heparmane is not acceptable for New and Nonofficial Remedies because there is insufficient evidence at hand concerning its therapeutic value. Since the product is not being marketed, the Council postponed action to await further evidence and published its preliminary report. The Council holds that the product should not be recommended to the general profession until its value or promise has been demonstrated by further clinical trial in obstetric clinics where there are men trained in the experimental method of medicine. (*Journal A. M. A.*, February 23, 1929, p. 649.)

ERCOLIN ANOTHER "COLD" AND HAY FEVER "CURE."—The Smith-Ernster Laboratories, Inc., of New York City, exploit a "patent medicine" known as "Ercolin." Ercolin is said to be the "results of six years of intensive research" made by Dr. Nicholas Ernster. Ercolin is described as an "entirely new physiological compound," which "reacts on the protein of the pollen, thereby neutralizing the effect of all pollens." From the examination made in the A. M. A. Chemical Laboratory we learn that this "marvelous remedy," perfected by the "eminent Boston scientist," Nicolas Ernster, Ph. D., as the result "of years of effort," is nothing more wonderful than a weak solution of gallic acid in dilute glycerine! (*Journal A. M. A.*, February 23, 1929, p. 670.)

FOOD VALUE OF THE PAPAYA.—Certain proprietary houses have capitalized the use of the dried juice of papaya (*Carica Papaya L.*) because of the ferment it contains, "papain." Papain has some of the properties of pepsin, but its digestive power is uncertain and feeble. As far as proprietary papaya preparations, which are claimed to contain the active principle, are concerned, the Council on Pharmacy and Chemistry voted as long ago as 1914 not to admit papaya preparations to New and Nonofficial Remedies. (*Journal A. M. A.*, February 23, 1929, p. 672.)

CONTRAINDICATIONS TO SALYRGAN.—Salyrgan is a complex synthetic mercurial which is contraindicated in acute nephritis and in the more severe chronic forms with nitrogen retention in the blood. In other cases of edema it may safely be employed in an initial dose of 0.5 cc. of 10 percent solution given intramuscularly or intravenously and increased to 1 or 2 cc. if required; injections are made at intervals of from three to five days. The preparation is marketed by H. A. Metz Laboratories, Inc., of New York. (*Journal A. M. A.*, February 23, 1929, p. 673.)

ETHYLHYDROCUPREINE BASE IN PNEUMONIA.—Ethylhydrocupreine, introduced as optochin, appears to

be a specific agent against the pneumococcus. It is, however, so much less efficient against other micro-organisms that, in an influenzal pneumonia due to any other organism than the pneumococcus, ethylhydrocupreine would not be of any use. Even in pneumococcus infection one could hardly call ethylhydrocupreine an ideal remedy. To have any effect it must be given in the largest dose tolerated and at the earliest possible moment. Its worst feature is its tendency to produce optic neuritis. To prevent this, the technic has been elaborated of giving ethylhydrocupreine base with milk. (*Journal A. M. A.*, February 23, 1929, p. 673.)

ABSTRACTS

TUBERCULOUS SALPINGITIS SIMULATING RUPTURED TUBAL PREGNANCY

KARL A. MEYER and A. F. LASH, Chicago (*Journal A. M. A.*, Feb. 2, 1929), report a case of tuberculous salpingitis simulating ruptured tubal pregnancy. They state that the correct diagnosis in the case was not established until a study of the microscopic section of the tube was made. No chorionic wandering cells or decidual reaction being present, pregnancy was ruled out. Only a marked tuberculous infiltration of the endosalpinx was present, with an area filled with tubercles in which the rupture had occurred. In addition to the absence of gestation elements in the tube, there were no changes in the breasts or uterus and no corpus luteum of pregnancy. No other tuberculous focus was determined in the patient. No gestation elements were found. The cause of the rupture and hemato-peritonitis was thought to be the necrosis of a blood vessel by the tuberculous process. The tubal tuberculosis was secondary to the peritoneal involvement, which was apparently healed. The hemorrhage was not only free in the peritoneal cavity but had dissected the peritoneum over the bladder and the broad ligament, which gave rise to pain in the left lower portion of the abdomen and tenderness over the bladder.

CHRONIC EPHEDRINE POISONING

In the case reported by WILLIAM H. HIGGINS, Richmond, Virginia (*Journal A. M. A.*, Jan. 26, 1929), the daily ingestion of ephedrine hydrochloride produced an unusual clinical picture. As experimental evidence is against any cumulative effect of this drug, the symptoms detailed may probably be ascribed to a hypersensitiveness of the patient. The diagnosis in the case was hyperthyroidism. Suddenly the patient began having frequent attacks of asthma. Her physician prescribed one-half grain (0.03 Gm.) of ephedrine hydrochloride to be taken after each meal. She had continued this form of medication regularly for about four months. About five weeks before Higgins saw her, after running upstairs, the patient became very tired and nervous, from which condition she had not recovered. Since that time she had been restless and had felt tense with an inability to remain still. She complained of more or less aching over the body with frequent chills and weakness. There had been at times a constant pounding of the heart and a coarse tremor of the hands. The patient had had periods of depression with frequent crying spells. Insomnia had been more or less constant during the past month. The patient's appetite had not been good and she complained of considerable gas coming on one or two hours after eating. There was also a feeling of nausea immediately after each meal. She stated that she had lost eleven pounds (5 Kg.) in the last five weeks. As the patient related her history, her entire body moved in a more or less incoordinated manner. At times there was a jerking of the head accompanied by rather purposeless movements of the arms of the choreiform type. She was constantly crossing and uncrossing her legs and moving from one position to another. A provisional diagnosis of chronic ephedrine poisoning was made. Within twenty-

four hours after the ephedrine had been discontinued the symptoms were definitely less, but the insomnia, lack of appetite and emotionalism did not disappear for three or four weeks.

PREVENTIVE MEDICINE AS APPLIED TO TUBERCULOSIS PATIENTS

The National Tuberculosis Association has procured histories of 1,499 white patients prior to their first admission to a sanatorium. All were at least 15 years of age and all were diagnosed as having pulmonary tuberculosis at the time they entered. The histories, taken by physicians associated with the institutions, were obtained in considerable detail. In addition to questions regarding matters of direct concern to the patient, a few were asked which had a bearing on the welfare of those with whom the patient had come in contact. Tuberculosis is a communicable disease. It follows that the best way to reduce the incidence of the disease is to prevent the bacillus from reaching a second host. Linsly R. Williams and Alice M. Hill, New York (*Journal A. M. A.*, March 9, 1929), state that four questions directly relating to the spread of infection were asked each patient in order to learn something of the extent to which members of the medical profession are practicing preventive medicine so far as tuberculosis is concerned. It was illuminating to find that, though 1,496 of these 1,499 patients had consulted anywhere from one to fourteen physicians each, 625, or 42 percent, had never been told by any physician how to dispose of the sputum. Of the 871 patients given this instruction, 677 first received it from the physician who first told the patient that his illness was tuberculosis; 107 from the physician immediately following the first, and twenty-four others by physicians still further removed from the one first telling the diagnosis to the patient. A still smaller number of patients were told by any physician that they should keep their dishes apart from those used by other members of their households and that their dishes should be washed separately. Approximately 47 percent of the patients failed to receive instruction regarding these matters prior to their admission to the sanatorium. The advice to sleep alone was given to 63 percent of all patients by some physician, more receiving instruction on this particular point than on any other preventive measure. However, only 61 percent were advised as to other sleeping arrangements. The question as to other sleeping arrangements comes under the heading cure rather than prevention, but the answers to it have a bearing on the answers to the question of sleeping alone. Taken together, they indicate that the thought of preventing infection was not always in the physician's mind when he advised his patient to sleep by himself, for 11 percent of the 945 patients who were told to sleep alone and 12 percent of the 919 given advice as to other sleeping arrangements were so instructed by a physician seen prior to the one who told the patient that he had tuberculosis. Except as an aid to the cure, the early instruction as to sleeping seems unexplainable, especially in view of the fact that the corresponding percentages for those instructed regarding disposal of sputum, use of separate dishes and washing dishes separately were six, seven and seven, respectively. A fact which calls for comment is that proportionately fewer patients who were able to have care in a private sanatorium had received instruction from their physicians prior to admission than had those admitted to public sanatoriums. This was the case with respect to each one of the items noted. When the group was considered as a whole, it was evident that, the further advanced the disease at the time of the patient's first admission to a sanatorium, the more apt he was to have received instruction previously respecting the several preventive measures. But, except in regard to sputum disposal, no such correlation existed in the case of the men or the women when considered alone. Each of the 1,499 patients from whom histories were obtained in this study was asked whether printed

(Continued on adv. page xx)

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ABSTRACTS

(Continued from page 178)

instructions had been given him by any physician consulted. No attempt was made to go into the detail of such instructions. Seventeen percent replied in the affirmative, the women to an extent between one-fourth and one-fifth greater than the men, and the women with moderately advanced tuberculosis to a much greater extent than any of the others. The best record on this score was shown by a group of patients reported on by one county sanatorium, 45 percent of whom had received printed instructions from some physician prior to their admission. The histories in this group reveal that instruction of tuberculous patients by their physicians in precautionary measures is not especially related either to the stage of the disease on admission or to the sex of the patient. Rather, the proportion of patients instructed varies with the communities served by the sanatoriums and the extent to which their interest in preventive medicine has been aroused. By far, too large a number of physicians gave none of the instructions asked about. Some who did stressed one point to the exclusion of others, some another. In view of the fact that the average physician sees only a few cases of active tuberculosis in the course of a year, he cannot be expected always to be a perfect instrument for the dissemination of advice to the patient; but this study would indicate that in the medical profession as a whole insufficient thought is being given to preventive medicine. One fact is evident: The saturation point has not yet been reached in the need for stressing prevention.

GASTRIC DIGESTION OF MEAT IN HEALTH AND IN DISEASE

In the diseased patient as exemplified by the chronic invalid with cardiac or renal disease, blood dyscrasia, and other conditions commonly encountered in medical ward service, the gastric digestion of meat is some-

what impaired. The results recorded by Martin E. Rehfuess and George H. Marcil, Philadelphia (*Journal A. M. A.*, March 9, 1929), were obtained after the ingestion of 60 Gm. of scraped meat, as compared with normal studies that were done with 100 Gm. portions. The significance of this was not determined experimentally, but it is probable that figures somewhat lower are obtained when smaller quantities of meat are ingested. In purely functional conditions and probably with peptic ulcer, meat digestion is not impaired so far as the secretory function is concerned. The authors would emphasize the necessity of examining all persons who show a minimal secretory response with an Ewald meal and a meat meal. In a certain proportion of cases the responses are prompt and direct with meat. Such a response offers a better prognosis. Failure to respond to both an Ewald meal and a meat meal may be of serious prognostic importance. They encountered this lack of response in pernicious anemia and gastric carcinoma. On the other hand, it was seen also in delayed resolution in lobar pneumonia and in chronic cholecystitis. A failure to respond to an Ewald meal is much more common than failure to respond to a meat meal. The authors believe that there is a normal difference in the total acidity produced by meat and breadstuff, in favor of the former to the extent of probably 30 per cent or more. Persons giving a similar response to bread and meat cannot be considered normal. Rehfuess and Marcil believe that the use of the two meals gives more reliable evidence of mucosal efficiency, particularly when subacid or anacid responses are obtained with an Ewald meal. The explanation of the greater response of the normal stomach is not attempted in this communication. Meat is a true intragastric stimulant, in health capable of producing a maximum response on the part of the gastric mucous membrane. That this response is altered in disease must be evident from the limited number of cases here studied.

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ORIGINAL ARTICLES

SURGICAL LESIONS OF THE KIDNEY*

VERNE C. HUNT, M.D.
ROCHESTER, MINNESOTA

The need for accurate clinical observation of the patient in diagnosis has never been greater than during the last two decades, during which rapid improvement has been made in laboratory and other diagnostic aids: Symptoms and data noted on general examination are of most importance, not only in their proper interpretation, but in the accurate evaluation of allied diagnostic methods. The newer diagnostic methods, however, have increased materially the accuracy of clinical diagnosis and are no longer to be dispensed with in the attainment of the highest degree of accuracy. The refinement of methods in the examination of the gastro-intestinal tract and those utilized in the examination of the urinary tract, as well as the precision of interpretation of observations by the roentgenologist and urologist, has resulted from the correlation of such observations with clinical, surgical and necropsy data.

The field of urology, as such, has developed largely during the last twenty-five years through the employment and perfection of diagnostic methods, made possible by cystoscopy and allied methods of examining the urinary tract, which result in almost exact diagnosis of the major surgical lesions of the bladder, ureter and kidney. Visualization by the cystoscope of the interior of the bladder, together with roentgenograms, cystograms, ureterograms, and pyelograms, reveals to the experienced observer deviations from normal which constitute trustworthy signs of anatomic anomalies and of early surgical lesions, as well as of advanced and extensive surgical lesions. Tests of renal function have been available long enough to have proved their worth as a guide to the time and method of treatment, and as a means of relative prognosis.

Intra-abdominal disease and disturbances in the urinary tract may be productive of indefinite and atypical symptoms leading to confusion in diagnosis. At times, by virtue of site, character, and

reference of pain, acute seizures from gallstones and those from renal and ureteral stones may be clinically indistinguishable. The frequency with which the appendix, and often the gallbladder, is removed for symptoms that have been produced by ureteral or renal calculus emphasizes the necessity of urologic investigation if there is doubt regarding the accuracy of the diagnosis. The differential diagnosis of many abdominal tumors is incomplete without pyelographic interpretation of the question of intrarenal or extrarenal involvement. The presence of roentgenographic shadows in the region of the urinary tract and the presence grossly or microscopically of red blood cells and pus cells in the urine should establish the necessity for thorough and efficient urologic examination. The interpretation of urologic observations has become so accurate and reliable that diagnostic exploration of any part of the urinary tract is rarely necessary. It is obvious that in the consideration of surgical lesions of the urinary tract dependable urologic diagnosis is most important.

It is not my purpose or desire, however, to discuss the various diagnostic procedures employed by the urologist, but instead to present in a general way certain facts and observations based on a review of the major surgical lesions of the kidney operated on at The Mayo Clinic during the years from 1922 to 1927, inclusive. During this period 1,640 operations were performed on the kidney. Nephrectomy was performed in 1,119 case (68 percent). In 157 cases of malignant disease of the kidney nephrectomy was performed with eleven deaths, a mortality rate of seven percent. Nine hundred sixty-two nephrectomies were performed for benign disease, with twenty deaths, a mortality rate of two percent. Five hundred twenty-one conservative operations were performed on the kidney, largely for lithiasis, with eight deaths, a mortality rate of 1.5 percent.

Lithiasis: Lithiasis is the most common surgical lesion occurring in the kidney; in this series it comprised 808 cases (49.2 percent) of the major surgical lesions of the kidney. Considerable difference of opinion exists regarding the etiology of renal and ureteral lithiasis. The theory of foci of infection is generally agreed on, but there are other factors still undetermined which play an important part. The most common constituents of

*Read before the Elkhart County Medical Society, Goshen, Indiana, April 5, 1928.

calculi are oxalates, urates, and phosphates; these are the most insoluble constituents of urine, and are held in solution to a higher degree in urine than in water. In normal persons and normal urine, even though present in excess, under certain conditions they retain their form of individual crystals. It would seem that the formation of calculi must be on the basis of chemical precipitation of the oxalates, urates, and phosphates, in a manner that provides agglutination of their crystals to the development of concretions. Just what the mechanism may be has not been determined. However, that chemical changes incident to the advent of bacterial invasion of kidney and urine may produce the precipitation can hardly be overlooked. Rosenow's theory of specificity of organisms is most important in the consideration of the etiology of lithiasis. He has shown that certain strains of bacteria have definite specificity, thus establishing infection as a most important factor, but just what the mechanism is by which precipitation and fusion of normal constituents of urine proceed to the formation of stone apparently is not known.

Braasch has presented data showing that stones in the kidney are multiple in more than forty percent of the cases and that in approximately ten percent they are bilateral. Single stones usually are situated in the pelvis and are readily accessible by pelviolithotomy. Multiple stones may be confined entirely to the pelvis, but usually if more than two in number they occupy the major calices. Experience has shown that all cases of bilateral renal lithiasis do not clearly indicate bilateral operation. In many instances the stone in one or the other kidney is small and if given an opportunity may pass spontaneously without operation. Certainly in the absence of symptoms referable to a small stone, when the indications are clear for operation on the other kidney, time and opportunity should be given for the passage of the single small stone before bilateral operation is undertaken. If, however, indications are clear for bilateral operation a question regarding the procedure sometimes arises.

Experience has shown that, except under unusual circumstances, it is not advisable to operate on both sides simultaneously; other things being equal, the kidney to which the acute symptoms are referable should be operated on first. In the absence of acute symptoms, but with distinct evidence of difference in the amount of renal injury incurred by the presence of stones, it has seemed best to operate first on the kidney with the better function, in order to take advantage of the function remaining in the poorer kidney during the acute stages following operation. Such a rule immediately presents the question of how much reliance may be placed on the differential functional tests in the presence of lithiasis. Experience has shown that it is sometimes difficult to estimate

renal function in such cases. Under certain conditions, difficult to explain in the absence of obstruction, there may be marked inhibition of secretion. Low differential estimations of function are common and indicate a degree of renal injury sufficient to make nephrectomy necessary. At operation, however, one may find a relatively normal kidney, and after a conservative operation for the removal of stone, normal function returns, as evidenced by the output of phenolsulphonephthalein. It has been suggested that tests of renal function afford only an estimate of the functional activity of the kidney at the time of operation, and not what the kidney may be capable of doing under normal conditions.

The kidney is often seriously injured incident to the presence of stones and infection. Unquestionably if stones remain in the kidney for a long time they tend to injure progressively the kidney and its function by mechanical means and infection. Stones may be "silent" so far as symptoms are concerned, but not actually, or even potentially inactive, so far as their ultimate effect on the kidney is concerned. This is well illustrated in the high percentage of cases in which extensiveness of the injury has made nephrectomy necessary. Nephrectomy was performed in 287 cases (35.5 percent) of the total number of cases of lithiasis. If the kidney is functionless as a result of lithiasis, or if there is pyonephrosis or marked infection, the indications for nephrectomy are clear. In order to reduce the high incidence of nephrectomy for renal lithiasis the presence of lithiasis must be recognized earlier. Large branched stones often raise the question of a conservative operation or nephrectomy. In the presence of adequate renal function, the conservative operation is the one of choice if the stone can be removed with a minimum of mutilation. Nephrectomy is certainly easier than the conservative operation in cases of large branched stones. Conservation of renal tissues under difficulties, however, distinguishes the surgeon from the "operator." Hamer recently presented an ingenious method of conservative removal of large branched stones. Conservatism is particularly desirable in cases of bilateral lithiasis in which there are multiple stones in both kidneys, with infection and reduction of function in both. It is noteworthy that the mortality rate from nephrectomy for lithiasis and infection is higher than that from the conservative operation for lithiasis when the latter can be carried out. There were seven deaths following nephrectomy, a mortality rate of 2.4 percent as opposed to 1.5 percent for the conservative operation. In three of these the cause was unusual. One patient was suffering from active pulmonary tuberculosis and nephrectomy was necessary on account of acute pyonephrosis with stones. The postoperative convalescence was uneventful until the evening of the ninth day, when death occurred from sudden profuse pulmonary hemorrhage. Another death oc-

curred nine days after operation from general peritonitis, secondary to perforation of stasis ulceration of the cecum, an exceedingly unusual postoperative complication, and one hardly to be reckoned with as a hazard in extraperitoneal operations. A third patient had bilateral lithiasis, and death occurred on the seventh day from renal insufficiency resulting from obstruction by a calculus of the ureter of the opposite side.

There were 521 conservative operations, that is, pelviolithotomy, nephrolithotomy or the combined operation. Stones were removed in eighty-five percent of the cases by pelviolithotomy. Even though stones are multiple and are in the major calices, they are usually readily removed through the renal pelvis. Pelviolithotomy, since it is the least destructive to renal tissue, is the operation of choice, while nephrolithotomy is usually necessary for stones in the ends of calices, which are inaccessible through the pelvis, or for so-called cortical stones, which in reality usually have originated in the calices.

It is possible for renal stones to reform, through the persistence of pre-existing foci of infection and other indeterminate factors associated with the formation of stones. There are so-called stone-forming kidneys in which calculi continue to develop even after all demonstrable foci of infection have been eliminated. True reformation of stones, however, occurs rather infrequently, and experience has shown that the relatively high incidence of reformation has in reality been the continued development of stones overlooked at the time of operation, or of particles incompletely removed, which serve as nuclei for subsequent stones. Surgeons of wide experience have all suffered the humiliation of being unable to find enough stones at operation to account for all the shadows in the roentgenogram, and of having shadows persist after operation. Likewise shadows have been found immediately after operation when the surgeon felt sure he had removed the stones completely. Multiple stones may overlies each other, and cast only one shadow. In other words, overlooking one or more stones at operation is a significant factor in so-called reformation of stones. Routine roentgenologic examination a few days after operation is the only means of distinguishing between the oversight of stones and subsequent recurrence.

The difficulty that the surgeon experiences in locating and removing all multiple stones, and his occasional failure to remove all stones as depicted by early postoperative roentgenograms, emphasize the need of aid in the localization of shadows at operation. Braasch and Carman, employing the principle of localization of foreign bodies in tissues at the operating table, devised a method of fluoroscopic examination with the kidney elevated out of the wound. The method has proved invaluable in the detection of even small particles of stony material which otherwise could not have

been found and has afforded reasonable assurance of complete removal of all stones before the conclusion of the operation. To determine definitely that the kidney is free from all stones at the close of the operation has afforded the surgeon and patient greater assurance of a good surgical result, and has practically eliminated the persistence of postoperative shadows in the renal area. Fluoroscopy at the operation has made possible the conservative operation of pelviolithotomy for multiple stones in cases in which nephrectomy was formerly often necessary.

Quimby has advocated the making and developing of films at operation as an aid in the localization of stones and for the assurance of complete removal of all stones. These methods have attained such importance in the surgery of renal lithiasis that to insure the best results it is questionable whether one is justified in contemplating pelviolithotomy, particularly if the stones are seen to be multiple without fluoroscopic aid or facilities for the rapid development of films at operation.

Ureteral and renal lithiasis are sometimes present on the same side. In this series they were associated in eighteen cases, in twelve of which simultaneous pelviolithotomy and ureterolithotomy were performed. In six cases complete nephro-ureterectomy was necessary. When the operation of complete nephro-ureterectomy is necessary because of a stone obstructing the lower part of the ureter it is best carried out by extraperitoneal exposure of the lower third of the ureter though the low median-line incision dividing and ligating the ureter at its entrance to the bladder. The entire lower half may be freed readily and tucked up toward the kidney and subsequently removed intact with the kidney through a posterior lumbar incision.

Renal Tuberculosis: Without entering into a consideration of the diagnosis it may be stated that the clinical recognition of renal tuberculosis has reached a high state of accuracy, and infection of the kidney is detected readily early. Although heliotherapy and other nonsurgical methods of treatment have been advocated, and unquestionably possess some merit, the cure of unilateral renal tuberculosis usually is not accomplished except by nephrectomy. Reservations placed on cure are dependent on the extent of the renal involvement, the presence of tuberculous cystitis, or the activity of tuberculous lesions elsewhere. In approximately 80 percent of cases of surgical renal tuberculosis, tuberculous lesions are associated; the latter, however, in the absence of general contraindications, should not necessarily deprive the patient of the benefit to be obtained from removal of the major tuberculous lesion if it is in one kidney. Diffuse miliary tuberculosis is considered a contraindication to nephrectomy. The low primary mortality rate following nephrectomy for unilateral renal tuberculosis justifies the operation even if there is moderate pulmonary involvement.

Braasch has reported a mortality rate of 20 percent within five years after nephrectomy, with a prognosis of partial recovery of 80 percent of the patients. Sixty percent have been completely cured, and 20 percent have had persisting vesical symptoms. The shorter the duration of the disease and the less extensive the renal involvement, the better the result.

Renal tuberculosis was the basis for nephrectomy in 305 cases, 27.2 percent of the various conditions for which nephrectomy was necessary. There were six deaths, a mortality rate of 1.9 percent. Here again unusual causes of death were observed: in two instances clinical postoperative evidence of suprarenal insufficiency was present and necropsy disclosed bilateral tuberculosis of the suprarenal glands; in one instance pulmonary embolism was fatal on the ninth day.

Indolent healing of the wound and a temporarily persisting sinus may follow nephrectomy for renal tuberculosis. This is usually due to incomplete removal of diseased tissue, persisting infection of the ureter, and the institution of drainage. While subcapsular nephrectomy is the operation of choice it is usually inadequate in cases of extensive renal tuberculosis. The perirenal fat is often involved in extensive tuberculous pyonephrosis, particularly if tuberculous perinephritic abscess has resulted and its incomplete removal retards healing. The ureter is usually thickened and dilated, and, if not actually tuberculous, presents definite ureteritis, which has, in many instances, been the cause of a persisting sinus. In an effort to obviate a postoperative sinus of ureteral origin, various methods of treating the ureter have been advocated, including injection with phenol at the severed end of the ureter, actual cautery sterilization of the stump, and bringing the ureter to the surface of the skin through a tube; this method has been described by Judd.

Walters, in a review of a series of cases in which nephrectomy has been performed for renal tuberculosis, and the ureter treated by the various methods, showed that ligation and sterilization of the severed end of the ureter with the actual cautery is the most satisfactory method of treatment, and results in fewer cases of a temporarily persisting sinus.

The insertion of drainage tubes after nephrectomy for renal tuberculosis is as inadvisable as the institution of drainage for tuberculous infection elsewhere. It invites secondary infection, and a postoperative sinus develops, with indolent healing of the wound. Closure of nephrectomy wounds without drainage results in primary healing in a high percentage of cases.

Infection of the Kidney: There are certain infections of the kidney, exclusive of renal tuberculosis and lithiasis, that are of surgical importance; in this series these comprised 336 cases (30 percent of all of the conditions that required nephrectomy). The terms, pyonephrosis, pyelonephritis, and hydronephrosis with infection, probably

in most instances designate different phases and manifestations of renal infection; the difference in nomenclature exists, in all probability, on the basis of the degree of renal injury and the amount of infection. There were seventy-three cases of extensive infection classified as pyonephrosis with four deaths, as opposed to one death in 259 cases of less extensive renal infection for which nephrectomy was necessary. The amount of infection has a significant influence on mortality rate, as shown by 5.4 percent rate for extensive pyonephrosis as compared to 0.38 percent for the less extensive infections classified as pyelonephritis, multiple cortical abscesses, and infected hydronephrosis requiring nephrectomy. It is obvious that the progression of infections of the kidney to the degree of pyonephrosis approaches, from the standpoint of operative risk, the mortality rate of nephrectomy for renal malignancy. In many instances, it is difficult to ascribe a cause for the variable amount of infection; however, in many cases of pyonephrosis, cortical abscess, and pyelonephritis it seems fair to consider a hematogenous origin in accordance with Brewer's conclusions, which are supported in part by the fact that perinephritic abscess occurs in many instances subsequent to an acute virulent peripheral infection, in which lymphatic metastasis can be excluded. Conclusive evidence is available in support of the conception that cortical abscess in the absence of primary renal disease is usually hematogenous; however, hematogenous infection does not always result in cortical abscess. Nevertheless, in the absence of primary renal disease, cortical abscess is probably the most common cause of perinephritic abscess. The origin of such perinephritic abscesses can be traced usually to pre-existing superficial or remote infection, such as boils, carbuncles, osteomyelitis, and so forth.

Several years ago I reported fifty-nine cases of perinephritic abscess, hematogenous in origin, which were observed in The Mayo Clinic.

Malignant Lesions of the Kidney: In this series there were 157 nephrectomies for malignant disease of the kidney, comprising 14 percent of the various conditions for which nephrectomy was necessary. Hypernephroma was the predominating lesion, occurring in 113 cases (72 percent of all the malignant lesions); carcinoma, twenty cases (12.7 percent); epithelioma, seventeen cases (10.8 percent), and sarcoma seven cases (4.4 percent). Most malignant tumors of the kidney progress by direct extension, and tend to metastasize remotely, which emphasizes the necessity of early recognition and treatment to insure the best results. In the absence of demonstrable metastasis and fixation of the kidney by direct extension to surrounding structures, nephrectomy affords the best prognosis. Inasmuch as papillary epithelioma of the renal pelvis differs considerably from all other malignant renal lesions, it is worthy of particular consideration.

Primary epithelioma of the renal pelvis is encountered as one of two distinct types: the flat squamous-cell, and the papillary. Although both are true epitheliomas, they present different microscopic characteristics, and even though the tumors have the same genesis, they differ materially in degree of malignancy and manner of growth and extension. On the basis of cellular differentiation the papillary epithelioma is less malignant than the sessile squamous-cell type, and while the latter progresses by direct invasion of tissues and tends to metastasize remotely, the former progresses by direct extension along the mucous membrane to the calices and along the ureter to the bladder, and does not tend to metastasize remotely. Because of these characteristics the surgical principles involved differ from those of nephrectomy for all other forms of malignancy. Papillary epithelioma of the renal pelvis is the least malignant lesion of the kidney and offers the most favorable prognosis if its avenues of extension are eliminated.

Recently I reviewed the cases of papillary epithelioma of the renal pelvis observed at the clinic; in two-thirds of the cases the bladder was involved at the time of examination or it became involved after nephrectomy or nephrectomy and partial ureterectomy. The high incidence of metastasis to the portion of the bladder immediately surrounding the ureteral orifice, or immediately adjacent to it, emphasizes the necessity of segmental resection of the bladder with the inclusion of the intramural portion of the ureter and the adjacent area at the time of nephro-ureterectomy.

The Fused Kidney: Anomalies of the kidney are those of blood supply, position and development. The anomalous blood vessels present many variations and aside from their anatomic interest are of particular surgical significance when they cause mechanical interference with the emptying of the renal pelvis, resulting in the production of hydronephrosis. Often hydronephrosis due to accessory vessels to the lower pole of the kidney has resulted in extensive injury to the kidney requiring nephrectomy; however, in those instances in which good renal function persists, division and ligation of the accessory vessels and plastic operation on the renal pelvis are worthy of consideration, even though they are not always successful.

The fused or horseshoe kidney is heir to most of the renal lesions. During the last six years in the clinic, operation was performed in twenty-three such cases. There were twelve cases of renal lithiasis in which the stones were removed by pelvolithotomy. In one of these the stones were bilateral. Heminephrectomy was necessary in six cases of hydronephrosis; cysts were drained in two cases, exploration for pain was carried out in two cases, and accessory vessels were divided in one case.

The relative inaccessibility of the horseshoe kidney, because of its posteromedian position and im-

mobility, is usually surmountable by accurate visualization of the operative field through an adequate posterolateral incision. Stones in the pelvis of an anatomically normal kidney are most readily removed through the posterior wall of the renal pelvis. The partial inward rotation of the halves of a fused kidney and the extreme anterior position of the pelvis permit access to stones in the pelvis or calices only through the anterior wall of the pelvis. The isthmus of a fused kidney is variable in width, but is usually thin and relatively avascular, facilitating heminephrectomy, when conditions such as hydronephrosis or tumor are present.

The ectopic kidney, the double kidney with complete reduplication of the renal pelvis, and a number of other anomalies and unusual miscellaneous lesions of the kidney offer many interesting problems; however, I have confined myself here to a consideration of the more common surgical lesions of the kidney.

ACUTE SURGICAL MASTOIDITIS FOLLOWING FRACTURE OF THE SKULL*

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The frequency with which this condition confronts us is sufficient to warrant a discussion of the subject.

Fractures of the skull, especially about the base, are usually produced in one of three ways:

1. Violence may be directed to the vertex, or to some part of the cranial convexity, as from a fall or blow upon a hard substance.
2. Direct or indirect injury is the cause of a certain number of these fractures, as by some pointed object being thrust through the upper wall of the orbit, up the nasal cavity, through the cribriform plates, or by gun shot or stab wound.
3. The impact, or the resistance of the vertebral column against the occipital condyles, produces fractures of the base, as by falling from a distance and alighting on the heels.

The fractures may run in any direction, longitudinal, oblique, or transverse, according to the compressing or fracturing force, and may affect any part of the base. They may follow the sutural lines, but it is not uncommon to the dense petrous bone, as well as the mastoid process. Naturally, transverse fractures are more likely to be confined to one fossa, while longitudinal may involve them all. Some fractures at the base of the skull are simple, but most of them are compound.

Fractures of the middle and posterior fossae are of most importance to the otologist, for the reason that in this area are located structures which are of importance, i. e., the apparatus for

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hearing and equilibration, the temporo-mandibular articulation, the jugular bulb, lateral and petrosal sinuses. These cases may or may not have labyrinthitis, involvement of the cochlea, facial paralysis, or mastoiditis. Mastoiditis is the complication which is under discussion, and a review of some of the literature is undertaken along with the report of four cases which have come under my own observation.

Politzer, in his work on Diseases of the Ear, under the heading of "Injuries of the Sound Conducting Apparatus," and in discussing fractures of the bony meatus says, "As a rule fractures of the meatus are seldom confined to this section, but are usually complicated with fissures of the superior and inner walls of the tympanic cavity, of the mastoid process, of the petrous portion of the temporal bone, and of the base of the skull. In a majority of the cases the tympanic membrane is ruptured and the injury is accompanied by profuse hemorrhage.

Walter Horn, of New York City, in the June, 1927, *Laryngoscope*, reported the following: "Traumatic Mastoiditis with Post Operative Signs Suggestive of Intra-Cranial Complications. A boy, struck by an automobile, was admitted to Mt. Sinai Hospital with his right ear bleeding, no escape of cerebro-spinal fluid, vomiting, headache, pain in the right ear and very restless. X-ray on account of restlessness of patient showed no fracture. Examination of membrana tympani revealed a linear tear in the superior and posterior quadrant. On the eighth day after admission the patient developed a temperature of 103. Severe pain in the ear and foul smelling purulent discharge was noted; a definite sagging of posterior superior meatal wall was observed; hearing impaired markedly and tender over entire mastoid area; a diagnosis at the time of acute mastoiditis was made. Simple mastoidectomy was done.

"Gross pathological findings at operation were as follows: Linear fracture found, began 1 c. m. above floor of middle fossa in squamous temporal, extending vertically through floor of middle fossa and extending through mastoid process and posterior canal wall just above semicircular canal. A fragment of bone was disclosed and removed. Mastoid cells were broken down and there was free pus.

"Bacteriological finding: *Streptococcus haemolyticus*.

"Post-operative course was uneventful for twelve days at which time the patient developed a temperature of 100, a pulse of 100, mild meningeal symptoms such as rigidity of neck, bilateral Kernig, definite left Babinski, hyperactive knee jerk, diminished abdominal reflexes, ankle clonus more marked on the left side. These signs indicated a right focal lesion, and cerebral abscess in temporal lobe was considered. Lumbar puncture revealed clear fluid under increased pressure, no

organisms, but increased cell count. Neurologist favored circumscribed meningitis. Ankle clonus at this time was increased on the left side, and optic discs showed swelling.

"No other operative procedure was carried out. Five days after this, the acute meningeal symptoms disappeared and the patient went on to recovery."

Harris' comments on the meningeal symptoms were as follows: "The probable cause of the transient meningeal symptoms was the traumatized dura, with overlying soft meninges at place where the sliver of bone was removed, and a circumscribed aseptic meningeal process."

W. Lange, in the *Journal of the A. M. A.*, September 18, 1926, in an article entitled "Fractures of the Skull and Chiseling of Mastoid Process", pleads for conservative treatment of not infected and not inflamed fractures at the base of the skull, and the only exception is in fractures of the mastoid.

An article written by Isaac M. Heller and Max M. Simon, and published in the *Medical Journal and Record* of November 2, 1927, entitled "Fractured Base of Skull Involving the Mastoid Portion of the Temporal Bone, Complicated by Mastoid Disease, Operation and Recovery of Two Cases."

Case I. Patient fell from an iron beam, struck his head, and resumed work after one-half hour. He came to the hospital two weeks later with pain and discharge from the left ear. Pressure over left mastoid showed slight fullness and marked tenderness. Membrana tympani was markedly inflamed, with fairly large perforation postero-inferiorly, discharge pulsated and reappeared after mopping away. X-ray showed cloudiness over left mastoid cells with little evidence of bone destruction and a linear fracture in the posterior third of the mastoid. The temperature was 103.4, pulse 100, respiration 28; one day after admission the temperature returned to normal; two days later his temperature rose to 103.6 and a leucocyte count of 14,600. Diagnosis: Acute mastoiditis.

Operation—Simple mastoidectomy.

Gross pathology: Infiltration of all soft parts, stellate fracture of mastoid process. Bone was cellular with moderate amount of destruction and not a great amount of pus.

Culture showed haemolytic streptococcus. Patient made an uneventful recovery.

Case II. Patient fell on his head in a fall down stairs; was conscious, but drowsy and complained of headache, but remembered nothing of the accident. There was free bleeding from the left ear, and patient vomited after admission to the hospital.

Physical examination revealed tenderness over the left mastoid. A right Babinski was present, a slight rigidity of the neck; the left upper eyelid

was swollen, but there was no evidence of monoplegia, hemiplegia, or involvement of the cord.

Temperature on admission was 99.6, pulse 80, blood pressure 120/80. Temperature and pulse increased progressively for five days, at which time the temperature was 102.6, pulse 100, leucocyte count 12,400.

Examination of the left ear showed tenderness on tugging auricle over the mastoid process and anterior to the tragus, oedema over mastoid, and ecchymotic spot in posterior auricular fold. Occlusion of canal at bony and cartilagenous portions precluded any view of the membrana tympani. The discharge was bloody and had a very foul odor.

X-ray showed linear fracture in mastoid process extending into lambdoidal suture, and cloudiness of mastoid, with no bone destruction.

Diagnosis: Acute mastoiditis, secondary to fracture of mastoid.

Simple mastoidectomy.

There was not much pus found at operation, but it revealed a fracture of the mastoid extending into the posterior meatal wall.

Culture showed gram positive bacillus of unidentified type.

Convalescence smooth.

These cases reported are typical of four which I have had the privilege of observing and which I wish to report.

Case I. A young man of twenty years of age was admitted to the City Hospital following an injury which occurred while he was riding a motor cycle at a high rate of speed, and from which he was thrown, striking his head against a telephone pole.

I saw this man about ten days after admission to the hospital. Previous to my seeing him, he had quite an extensive trephine. When I first saw him he was quite delirious. The reason for an otological consultation was a foul, bloody discharge from the right external auditory meatus.

Examination of the canal was practically occluded by swelling, and the membrana tympani could not be seen. There was considerable post auricular infiltration, pain on pressure over the entire mastoid area, and pain on pressure anterior to the tragus.

X-ray revealed a linear fracture through the mastoid and squamous portion of the temporal bone to the region of the posterior canal wall with little bone destruction.

Leucocytes 16,400, temperature 100.4.

Diagnosis of acute mastoiditis, surgical type.

Simple mastoidectomy.

Gross pathological finding: After baring the external wall of the mastoid, the cortical cells could be made out in detail due to their peculiar bluish color.

Upon opening the mastoid cavity the periantral cells were broken down and the remainder of the

cells appeared to be filled with blood clot. The line of fracture was disclosed and found to extend into the posterior meatal wall. After ten days of a stormy post operative course, the patient made complete recovery.

Case II. A young girl was admitted to the Robert W. Long Hospital from a nearby town, with the history that she had been automobile riding with a young man, and when within a mile or two of town she became frightened by the actions of her companion and jumped from the automobile, alighting on her feet. She said she felt slightly stunned, but walked to her home. On her way home she discovered moisture about her right ear, and on reaching home found she was bleeding from it. This continued for one week, when there was a purulent discharge from her ear, bloody in character. She had at times considerable headache, fronto-occipital in nature, and had fever. About two weeks after the accident she was admitted to the hospital with a temperature of 104.

White count of 21,000 plus; and patient was slightly delirious at times.

Examination of patient revealed a profuse purulent discharge from the ear, the canal was partially occluded, a ruptured membrana tympani in posterior inferior quadrant. Posterior superior meatal wall was bulging; there was marked tenderness over the entire mastoid and over the mandibular articulation. Neurological findings were negative, other than slight delirium.

X-ray finding: Linear fracture through mastoid involving posterior bony meatus, necrosis of bone about the knee of the lateral sinus.

A diagnosis of acute suppurative mastoiditis due to trauma.

Operation—simple mastoidectomy.

Gross pathological finding: Upon opening the mastoid antrum there was a free flow of pus with pulsation, and a peri-sinus abscess was suspected. The lateral sinus plate about the knee of the sinus had necrosed through, and the lateral sinus was exposed within the cavity and found to be covered by granulations. The posterior cortical cells could be made out and were bluish in appearance and were found to be filled with blood clot. The line of fracture was made out and found to involve the posterior wall of the bony meatus. Post operative course was uneventful. Temperature subsided promptly and delirium immediately cleared up.

Case III. A man sixty years old, a painter by trade, consulted me at the office, complaining of a headache, deafness, and pain in and about the left ear. He gave the following history: Five weeks previous, while house painting, he had started down a ladder and when about fifteen feet from the ground, a rung of the ladder gave way and he fell to the ground, alighting on his feet. He said he was stunned for a short time, but after luncheon he continued work, but was deafened in

this ear and had a slight headache. That night, when getting ready for bed, he said he expectorated a small amount of bloody sputum, but thought nothing of it.

He returned to work the following day and worked three weeks, then remained at home for one week, and finally consulted his family physician one week later, who then referred him to me.

Examination of ear: Inspection of canal showed it to be slightly inflamed, with slight bulging of posterior-sup-meatal wall; membrana tympani dirty gray in appearance, bulging slightly with no evidence of rupture, and there was tenderness of entire mastoid area. The patient complained of a slight frontal headache at night; had a temperature of 99.6 and had the appearance of a sick man. Advised to go to hospital for observation, and entered Methodist Hospital next day.

Leucocytic 10,400, temperature ranged from 99.1 to 100. X-ray revealed a slight linear fracture extending through the upper portion of the mastoid toward posterior meatal wall, and almost complete destruction of cells.

Diagnosis: Acute mastoiditis due to trauma.

Operation—Simple mastoidectomy.

Gross pathological findings: After cortex was removed the remainder of the cells could be easily scooped out with a curette; the lateral sinus was exposed and found to be covered by healthy granulation. Line of fracture was made out and involved posterior tympanic wall.

Bacteriology: *Streptococcus mucosus encapsulatus*.

Patient went on to uneventful recovery.

Case IV. M. K., a boy eighteen years old, was admitted to the Robert W. Long Hospital on July 19, 1928, as an emergency case. The history of his injury was that he had been riding a motorcycle at a good rate of speed when he struck a bus and was thrown off.

Examination revealed a small scalp wound in the parieto-occipital region. There was bleeding from the left ear, which was thoroughly cleansed.

X-ray: Linear fracture extending backward and upward from the upper portion of the left mastoid, also a rather definite widening of the left occipito-parietal, and tempora-parietal suture lines.

Patient was kept under observation for a period of nine days without any further findings. On the tenth day he had a slight rise of temperature, on the eleventh day a marked rise of temperature, and on the twelfth day a spinal puncture was made. There was a slight increase in pressure, no cells, and Pandey's was negative.

On the thirteenth day I saw the case and an x-ray was ordered of the mastoid, which demonstrated a mastoiditis, there being evidence of pus and bony destruction.

Examination of case: There was a purulent discharge, bloody in character; external auditory

meatus was much swollen and occluded the membrana tympani; there was tenderness over the entire mastoid and anterior to tragus. Patient was drowsy.

A diagnosis was made of acute mastoiditis due to trauma.

Simple mastoidectomy was done.

Gross pathology: Upon opening the mastoid a free flow of bloody pus was encountered which was pulsating; a peri-sinus abscess was revealed and the sinus uncovered and found to be covered with a great deal of granulation tissue. The line of fracture was discovered and found to follow the lateral sinus groove posteriorly and anteriorly; through the mastoid into the posterior tympanic wall. The sinus was uncovered for about two inches posterior and the dura exposed below and above the sinus groove.

Post operative course: For three days the patient had distinct chills and on the fourth day a blood culture was taken which showed *staphylococcus aureus*, and haemolytic *streptococcus*.

Medical attendant advised *streptococcus* antitoxin intravenously, which was given and following this the patient had an anaphylactic shock. Patient's condition following this was very grave. The patient was given large doses of adrenalin and caffeine. At 6:00 A. M. following this, the patient's temperature rectally was 95, but by 4:00 P. M. it was 105 rectally, and he had a very severe chill. At 6:00 P. M. I saw patient and advised reopening the mastoid and ligating the jugular, which was done at 11:00 P. M.

He continued to run a high temperature for several days. On the sixteenth of August his high curve began to drop, and another blood culture was negative. In the convalescence following operation there were several pyemic abscesses developed in the left thigh, one in the right ankle, and one in the sterno clavicular articulation.

In summarizing, it may be said there were no definite findings indicative of skull fracture other than drainage from the left ear for ten days, then symptoms of sepsis appeared and the mastoid was opened and drained. Following the mastoidectomy the patient was quite septic with increased white count. This continued following the ligation of the jugular and drainage of the sinus. The patient's general condition began to improve in spite of continued sepsis. He suffered a severe reaction from the *streptococcus* antitoxin. After sepsis disappeared the patient continued to improve and was in remarkably good condition when he left the hospital on October third.

SUMMARY

1. All cases reported had a line of fracture which passed through the mastoid process involving posterior bony meatal wall or posterior wall of the middle ear.

2. Three cases reported by the writers quoted, and two cases reported by myself were fractures

of the skull with involvement of the mastoid. They would fall in the first classification as to cause of fracture. Two cases reported by me would fall in the third classification.

4. Two cases had peri-sinus abscess.

3. All but one case had bleeding from ear which would indicate a rupture of the membrana tympani.

5. One case had the complication of sinus thrombosis with multiple abscesses.

6. In five cases there was evidence of slight or grave neurological symptoms and two cases revealed no symptoms.

7. Organisms found were hæmolytic streptococcus, staphylococcus aureus, streptococcus mucosus encapsulatus and gram positive bacillus unidentified.

8. Laboratory findings were helpful in all cases where obtained.

CONCLUSION

The cases of fracture of the skull, where there is bleeding from the ear, should be examined by an otologist, and where there is a fracture involving the mastoid, they should be in constant attendance. If there is evidence of complicating mastoiditis, operative procedures should be carried out at the earliest moment.

CONTRACEPTION

ARE OUR COUNTY SOCIETIES BEING USED FOR
THE AMERICAN BIRTH CONTROL LEAGUE
PROPAGANDA?

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In the March number of the *Indianapolis Medical Journal* appears an article on the first page of that issue by one "James F. Cooper, M.D., Medical Director of the American Birth Control League." In a footnote on the same page it is stated, "Delivered before the Indianapolis Medical Society, Indianapolis, Ind., February 26th, 1929."

The Directory of the American Medical Association gives the names of two men by the name of James F. Cooper. Apparently the one who read the paper is James Fryer Cooper, of New York City, who is listed as "not in practice." A letter from the director of the Bureau of Investigation of the American Medical Association to the secretary of the Indiana State Medical Association, under date of March 27th, 1929, in speaking of Dr. Cooper, says in part:

"He is not a member of his local society, nor, of course, a Fellow of the American Medical Association. Dr. Cooper seems to be going around the country giving talks for the American Birth Control League. It seems further that after he has appeared in a given town the physicians are circularized by a concern that makes a business of putting out certain contraceptive preparations of a proprietary character. These products

are mentioned by name and in detail in Dr. Cooper's book."

The writer was informed that the question of the propriety of having a paper on this subject read before the Indianapolis Medical Society by an outsider was considered by the Council of the Society and that after consideration it was decided to refer the matter to the Society. At a meeting when the matter was to be considered Dr. Cooper appeared and made a statement in reference to the alleged importance of the topic he desired to discuss, and in the face of some opposition by the older members of the Society a vote was cast permitting him to read a paper at a subsequent meeting. During many years of membership in, and somewhat intimate acquaintance with, and devoted loyalty to, the Indianapolis Medical Society, this is the first time the writer recalls the apparent solicitation by an outsider for the privilege of reading a paper before the Society, and especially one about the character of which there appeared grave doubt on the part of many members. A recent report from Evansville, Indiana, indicates that what was presumably the same paper was read before the Evansville Society by the same Dr. Cooper.

A few months ago the writer received circulars advertising a book written by James F. Cooper, M.D., on the "Technique of Contraception." In the circulars there were published the names and comments of eminent men on birth control, and reference was made to certain physical conditions and to acquired disease where conception involved great danger to the patient's life. The impression was conveyed that the book was a recent and highly scientific production, and nothing said in it gave the idea of commercialism. The impression of its really valuable scientific character and value was emphasized by the price asked, \$7.50, and the statement that it was sold only to members of the medical profession.

The question of contraception in many cases of renal and bladder disease of various types, especially the tubercular variety, has been a perplexing one to the writer for many years. Owing to the ethical impression conveyed by the advertising the writer ordered a copy. The book, it appears, is not acceptable for the United States mail as it was sent by express. Without attempting to review it it may be stated that it is a well-printed and cloth-bound volume of something over 250 pages which, according to the price charged for medical books at present, might be worth \$2.50 or \$3.00. As to the contents, the author seems to have thought it desirable to give the book a certificate of character by devoting more than twenty pages to quotations from well-known individuals in and out of the medical profession, including the author's commendation. The quotations are very cleverly taken apparently from the text of articles where the part quoted may convey a very

different impression than would obtain from reading the entire article. Even Theodore Roosevelt, the great apostle of large families, is quoted as saying, "I have never preached the imposition of excessive maternity on any woman."

Paragraphs were taken from the writings of men long since dead, and it seems hardly fair to conclude that in all cases quoted the excerpts correctly represent in full their real views. Others quoted have clearly expressed themselves in favor of birth control under certain conditions. Instead of finding the book confined to an accurate, scientific discussion of physical conditions definitely contra-indicating conception for the safety of the mother, it frankly advocates contraception on social and economic grounds.

In his paper read before the Indianapolis Medical Society the essayist says that "tuberculosis, cardiac, renal, toxemia, debilitated and other pathological conditions may require some permanent or temporary relief from childbearing." *There is nothing new in that.* Everybody knows it.

In the next paragraph he says, "In more recent times social, domestic and economic conditions often indicate that childbearing shall be a voluntary and intelligent procedure, etc." *Everybody doesn't know that,* and there is a host of intelligent, capable, high-minded, sincere physicians who regard such doctrine as wrong.

As to the book and the published copy of the paper read before the Indianapolis Medical Society by Dr. Cooper, one fails to find anything especially new in it as to technique in necessary cases of contraception. Diaphragmatic pessaries were known long before Dr. Cooper advocated them. A slight modification of an old German model may be found a little more convenient for him in the conduct of the so-called birth control clinic, but it involves nothing new in principle. Condoms and chemicals and coitus interruptus are not new.

One of those present at the meeting stated recently that he thought there were about two hundred in attendance when the contraception paper was read. He said that there were so many new faces and young faces that he made an estimate of the actual number of the members of the society who were there and thought there were about fifty. Young women were present in addition to the lady physicians who had a perfect right to be there. The writer does not think it quite fair to medical students and trained nurses to infer that they composed the majority of the group of young men and young women present. It is not known by what influence or solicitation laymen should have been led to attend a supposedly strictly professional gathering, but one layman who was there, sitting beside one of the older members of the society, and evidently disgusted with the whole procedure, remarked to the physician sitting next to him, "Why not use applebutter?" when the subject of the use of

vinegar injections was mentioned by the speaker of the evening. The medical friend to whom the remark was made, and whose sympathy and opinion did not approve the paper presented, was quick to take advantage of the layman's remark and repeated it in his discussion of the paper. It would be interesting to know how many of the group present would have been in attendance on this occasion if the contraception plan advocated had been successfully applied in former generations.

In view of the fact that "James Fryer Cooper, Medical Director of the American Birth Control League," is not a practicing physician, as is indicated in the Directory of the American Medical Association, and in view of the fact that he seems to be traveling around from one county society to another with his contraception propaganda, it seems fair to ask the question as to what financial interest he may have in the agitation of the subject of birth control, and as to whether the Indianapolis Medical Society and the Evansville Medical Society have been "sold" to the author of a book and the promoter of sales of a cheap pessary and lubricant at a high price. A member of the Indianapolis Medical Society has made inquiry of the New York firm that advertises the pessary and the Cooper contraceptive jelly, and they state that Dr. Cooper has no financial interest in the sale of these articles.

The writer and probably many other members of the Indianapolis Medical Society received a return postal card a few days after Dr. Cooper's paper was read before our local Society, and on the return postal card it was stated that the firm mailing the card would be very glad to have their representative call upon those to whom the card was sent and receive orders for the articles referred to. The firm was obliging and left nothing for the recipient of the postal card to do but to sign his name and drop the card in the letter box. Apparently the first method was not efficient, and a few days ago a circular letter came from a firm in New York stating that "Two highly specialized gynecological products not available at your local druggist's are described in the enclosed price list."

The price of the diaphragms was given as follows:

Singly or in small lots, any size, each,	\$ 2.00
1/2 Doz. lots, any size, per 1/2 doz.....	11.00
Dozen lots, any size, per doz.....	20.00

In Dr. Cooper's book emphasis is placed upon the importance of the liberal use of the lubricant. The price list circular says:

Lactic acid jelly (Cooper):	
With glass nozzle, singly or in sml. lots,	\$ 1.00
1/2 Dozen lots, per 1/2 doz.....	5.50
Dozen lots, per doz.....	10.00
Without glass nozzle,	
singly or in small lots, each.....	.90
1/2 Dozen lots, per 1/2 doz.....	4.80
Dozen lots, per doz.....	9.00
Glass nozzles, \$.20 each; per doz.....	2.00

In view of the fact that \$7.50 is asked for a book which ordinarily should bring half that

amount through regular channels, and that \$20.00 a dozen is asked for little rubber diaphragms with a marginal coil which presumably could be manufactured in wholesale lots for a dollar a dozen or less, and tubes of lubricant with a lactic acid content are priced at \$10.00 a dozen when they could be produced by wholesale at an expense of possibly less than \$1.00 a dozen, it seems obvious that this means of decreasing the population is financially profitable to somebody.

It should be distinctly recognized that the medical profession has an adequate understanding of how to prevent conception in cases where physical conditions contra-indicate it. A reading of Dr. Cooper's book and paper does not seem to disclose anything sufficiently new scientifically to justify their publication and the contraception opinions therein contained.

The sale of lubricating jelly containing a little lactic acid at \$10.00 per dozen tubes, as per the price list above referred to, "for physicians only," implies that the members of the medical profession are to be the selling agents to patients. The book says the lubricant is to be used freely, and the patient is to be taught in detail how to use the lubricant and pessary herself. It is not stated what commission physicians should charge for these articles in addition to their regular professional fees. It seems fair to infer that socially ambitious young husbands and wives who desire to avoid the consequences of the marriage contract are expected to pay well for the immunity (?) secured. Sexual urge and the desire to escape responsibility in youth may have a tragic sequel in childless old age which is not foreseen by the selfish spirit of youth or middle age.

In a letter from the executive secretary of the American Birth Control League, under date of April 1st, 1929, addressed to a member of the Marion County Medical Society and answering an inquiry he had made, the statement is made that "Dr. Cooper is not connected directly or indirectly with any supply houses nor is he receiving one cent of profit from any firm dealing in contraceptives. The board of directors of the league decided some months ago that at medical meetings when questions were asked as to where contraceptives found most effective by the Clinical Research Bureau might be secured, Dr. Cooper should give names of the only three supply houses which we know in this country which are doing an ethical business with physicians only." And further, "The prices asked for all these things are far too high, but with the present federal restrictions, and the fact that they cannot be advertised as contraceptives, I suppose the manufacturers feel that their field is limited and that they must charge higher prices because of that fact. If Dr. Cooper has indicated a preference for any particular firm

it is probably because he considers theirs a better product. If they find out where he has been the supply houses are very apt to circularize all the doctors in cities Dr. Cooper has visited." It would be interesting in this connection to know how they "find out where he has been."

The stationery upon which the letter above referred to was written contains the names of thirteen officers and directors of the league, three of whom have M.D. following their names, one of whom has D.D. following his name, and the remainder of the thirteen are women. The list of the "National Council" is also on the stationery, and includes the names of seventy-six persons from different parts of the United States, some of whom are well known to the public, and forty of whom are women, including those mentioned as officers.

No one questions the prominence of some of the persons whose names appear, neither does anyone question their sincerity in supporting the league propaganda. Others quite as sincere find it *difficult to understand how the devil could have conceived a more seductive or more suggestive appeal to lust and selfishness* than the propaganda for the use of supposedly scientifically safe contraceptives. That the method is not 100 percent safe is conceded by the author of the book and paper referred to. That it is not in the interest of society is shown by the attitude of the national government. That it is not approved by the American Medical Association or any state medical society of the country is very well known. That the propaganda publications on contraceptives are not tolerated in the United States mail is acknowledged by the executive secretary in the letter herein quoted. Homilies on the necessity of preventing conception where disease or deformity contra-indicate it do not disguise the covert and seductive invitation to supposedly safe and indiscriminate indulgence whether married or single.

The writer is not at all convinced that the leading reason for the establishment of so-called birth control clinics, and the production of the class of literature represented by Dr. Cooper's book and his paper presented before the Indianapolis Medical Society, or the promotion of the sale of cheap pessaries and lubricants at a high price, is based alone on interest in the moral and physical welfare of women or the public. The medical profession understands its duty in cases where conception is contra-indicated, and is competent to perform it, and does not need the literary padding that fills a considerable part of Dr. Cooper's book on this phase of the question as a preface to the discussion of details for the control of conception at the option of individuals desiring to evade the laws of nature. It is hoped that the Indianapolis Medical Society will not soon again be "sold" for such purposes, and that the postal authorities will take such action as seems right.

URINARY INCONTINENCE*

THE SURGICAL PHYSIOLOGY INVOLVED IN THE CURE OF CERTAIN TYPES

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High grades of urinary leakage tend to make the sufferer a social outcast. There is no argument that any grade of urinary incontinence is an uncomfortable affliction, but it may be surprising for a moment to consider that some form of incontinence is a common lesion. In the last decade important therapeutic advances have been developed so that now every type of incontinence can be benefited by treatment and nearly every case radically cured. We shall set forth in this paper a description of some of the common types and correlate briefly our therapeutic instruments of cure.

Excluding fistula, incontinence is due to a defect in the sphincter mechanism, which we must examine briefly. It is a neuro-muscular apparatus which, for convenience, may be integrated into three parts—namely, the central nervous system, the reflex arc of the peripheral nerves, and the sphincter muscles.

First, the spinal cord. In this segment of the arc in all mammals there can be demonstrated two segments having to do with urination. The upper, usually the twelfth dorsal and first and second lumbar segments of the cord, gives rise to the lumbar splanchnic nerves, which, passing through several ganglia, reach the periphery in a non-myelinated form. The lower, characteristically the second, third, and fourth sacral segments, gives rise to the long myelinated pelvic splanchnic nerves. This latter area is the principal receptor for sensation from the bladder and urethra. Lesions of the spinal cord producing true incontinence are probably "irritative" lesions in the sacral cord. They are rare. All other central lesions, disturbing function of the bladder, produce retention (and "overflow" incontinence as will be seen below).

Second, the peripheral nerves. There are three sets of these—the internal pudic nerves (a part of the voluntary nervous system from the sacral cord) innervate the striated sphincteric muscles of both urethra and anus; the lumbar splanchnic (sympathetic) and the para-sympathetic pelvic splanchnic nerves (the *nervi erigentes* from the sacral segments of the cord) which have antagonistic action, control the internal sphincter. The lumbar splanchnic nerves are probably most often concerned with the filling of the bladder since adrenalin¹ and electrical stimulation² of these nerves cause the trigone and internal sphincter to contract. These last two groups of nerves contain both sensory and motor fibres and are included

in a reflex arc which is of great importance since section of the posterior sacral nerve-roots without damage of the anterior roots causes complete retention of urine.³

Finally, the sphincteric muscles. These consist of an external thin sheet of striated muscle in the deep compartment of the trianguler ligament and an internal condensation of the circular smooth muscles of the bladder at the vesical neck. Either is sufficient to insure continence.

Disturbances of any part of the mechanism may cause incontinence, although disturbance of the spinal cord and of the sphincter greatly outnumber the rare, isolated disorders of the peripheral nerves. In the diagnosis of incontinence these must be distinguished carefully. It is of importance also to know whether the bladder is full or empty, when incontinence occurs, to rule out the paradoxical type of "overflow" incontinence. As illustrating two of the types of incontinence the situation resulting from severe spinal injury may be cited. If the bladder-centers are seriously disturbed retention will ensue immediately, and if this is allowed to persist, after a variable period, usually days, sufficient tonus will return to the detrusor muscle to produce constant dribbling of urine. This must be differentiated clearly from the automatic bladder, in which by the action of the mass reflex, coming on some weeks after the injury, the bladder is partially emptied involuntarily at irregular intervals.

Six Common Types of Incontinence: First, the paradoxical incontinence due to a hypertrophied detrusor muscle with overdistended bladder and some obstruction in the urethra. This is a common cause of dribbling seen most often in the male and occurs usually with a high grade of urethral stricture or with prostatism. As Young⁴ and others have pointed out, not all of these people with prostatism and dribbling have a large residuum of urine; twenty percent of Young's cases had less than 100 ccm. Urine probably leaks out between distended prostatic lobes which also interfere with proper closure of the sphincters.

Second, the incontinence of central origin, the common variety of which is seen in *tabes dorsalis*. The sensory and motor paths of the bladder are involved to some extent in a large proportion of tabetics. The characteristic bladder-picture is retention with weakness of the detrusor. The lesion may produce any picture, however, from the rare true incontinence with empty bladder, through various degrees of retention, to paradoxical incontinence with large amount of residual urine. "Central" incontinence also occurs due to the lesions associated with *spina bifida*, notably fibrous bands compressing the dural sac,⁵ lipoma in the spinal canal, etc. Closely allied in type with this "surgical lesion" is tumor of the spinal cord. These

*From the Dept. of Surgery, University of Chicago. Read before Lake County Medical Society, Feb. 14, 1929.

lesions are examples of the relatively circumscribed central lesion as compared with the diffuse involvement of tabes.

Third, incontinence due to disturbance of the peripheral nerves. This type is seen most often following perineal operations on the rectum, usually for carcinoma, where the internal pudic nerves are traumatized.

The fourth type is due to sphincter absence or its equivalent. This type is due usually to congenital abnormality. Congenital absence of the sphincter has been described but is very rare. The embryological anomalies of extrophy of the bladder, and its lesser grades of hypospadias and epispadias are more frequently seen. Here the sphincter muscles are usually present, but in a horse-shoe type of non-union, with superimposed atrophy of disuse. This group of lesions has the one important outstanding characteristic that the anal sphincter is usually intact and normal.

Fifth, sphincter weakness, always acquired, differs in the sexes as to its etiology. In the male this form of incontinence is due to operative procedures, notably prostatectomy. It occurs in both the perineal and suprapubic attack on the prostate, much more commonly in the former. In women sphincter weakness is a common cause of incontinence. Taylor and Watt⁷ in 1,006 routine gynecological cases at the Roosevelt Hospital found leakage in 21.6 percent, the incidence rising with parity. In this series 14.4 percent had poor or absent control. As they and others have pointed out, women will speak of it only if incontinence is sufficiently great to cause constant wetting (without direct questioning). The causes of the incontinence are probably two in number. The female urethra is attached to the under surface of the symphysis by comparatively strong fascial supports. The posterior wall of the urethra, *per contra*, is closely incorporated in the anterior vaginal fascia and is a part of it. Injuries of the fascial sheet allowing prolapse of the bladder permit on straining rotation of the urethra around the fixed anterior portion so that the meatus points upward, the cystocele destroying the mechanical advantage of the sphincter. Apart from this disadvantage arising from cystocele, there is often organic sphincter damage or atrophy. In proof of this last statement there is the not infrequent occurrence of incontinence in middle-aged, nulliparous women and the fact that the leakage may come on years after the obstetrical labor in the parous.

Sixth, is incontinence due to abnormal opening of the ureter outside of the sphincters?⁸ There have been eighty-nine cases of this lesion reported. It has a specific syndrome which is pathognomonic. The patient has dribbling and is constantly wet. In addition he is able to urinate ounces at about normal intervals. Catheterization after urination demonstrates an empty bladder. Search after in-

jection of dyes parenterally will disclose the opening, although sometimes with difficulty.

Nocturnal enuresis in children is a specialized subject which I shall not discuss here.

Treatment of Incontinence: The tools for plugging the leak are varied and useful. For the paradoxical incontinence resulting from prostatism and urethral stricture, the appropriate, well-standardized methods of dealing with the trouble will cure the patient.

The diffuse nervous lesion is much more difficult to treat. Intensive antiluetic therapy has given good results in a few cases of tabes dorsalis.⁹ If the incontinence is paradoxical with great overdistention, or if there is infection, the catheter, at regular, relatively short intervals, must be resorted to. In the circumscribed lesion such as spina bifida, exploration has yielded good results as reported by Delbet and Leri. These authors found a fibrous band compressing the dural cul-de-sac and resection of this band usually relieved the incontinence. All but three of twenty-four cases were improved by this operation. Incontinence was also relieved in the case of Leopold. Bailey¹⁰ reports improvement following operation in two cases of spina bifida. In one an intradural lipoma was removed.

In extrophy of the bladder, the submucous implantation of the ureters into the rectum¹¹ is indicated. This operation may be done in all types of incontinence provided that (1) the anal sphincter is competent to hold water, and (2) the ureters are not greatly dilated. It is not recommended in progressive lesions of the nervous system. If there is doubt as to the competency of the anal sphincters to fluid, tests of retention of enemas may be given. In epispadias, permanent post-operative incontinence (prostatectomy) and allied conditions, two procedures are acceptable: the plastic operation of Young,¹² on existing sphincter tissue, if any, and the creation of an artificial median bar. And in the absence of sphincter tissue, muscle transplantation. Muscle transplantation has been used since 1910 in Europe with some reported good results and some failures. Two case reports in which the gracilis muscle, which has double innervation, is detached near the knee joint from its insertion, wrapped around the urethra and later found viable in a contractile state, have been encouraging.^{13 14} This method, whose value is still unsettled, is promising enough to warrant further exercise of it. The pyramidalis-rectus abdominis (Goebel-Stoeckle^{15 16}) and the levator ani muscle have been also used in the construction of an artificial sphincter. Mild incontinence after prostatectomy is often temporary and may be benefited by exercises of the urethral sphincter.

In dealing with the aberrant ureter, resection of renal tissue has given the best results. The operation of second choice is the transplantation of the triant ureter to the bladder.

No successful direct attack on lesions (traumatic) of the peripheral nerves has been made as yet.

In the incontinence of middle-aged women due to cystocele good results follow anterior colporrhaphy. Usually attention must be paid to the neck of the bladder and urethra in addition. Hugh Cabot¹⁷ for years has done plastic repair on the sphincter with cure. In the hands of all operators the operation of H. A. Kelly¹⁸ has yielded brilliant results. This technically simple operation consisting of mobilization of the bladder neck and posterior portion of the urethra and apposition of spincteric muscular tissue and fascia (without isolation) by means of mattress suture, leads to dramatic cure in a few days. It is not as widely known to the general profession as it deserves since many women have been told that their incontinence is incurable.

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SOME OBSERVATIONS ON VACCINE AND ALLIED THERAPY*

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The use of vaccines in nearly all branches of medicine has become rapidly and increasingly an almost discarded procedure. In the hands of a very limited number, results have been obtained which are unquestionably successful.

The majority of reports in the literature are not favorable to the use of these agents. Furthermore, a great degree of skepticism is openly or critically expressed with reference to successful use of vaccines. Opinions, both pro and con, have been expressed by conservative men of the leading scientific groups. Yet one is impressed by the fact that there seems to be a lack of correlation between the immunological principles and the results obtained therapeutically. On this observation the questions arise: When are vaccines ever successful as therapeutic agents? Is there a reason for the failure of results in the use of vaccines?

On the basis of these two questions, a study was begun in regard to the methods of vaccine prep-

aration and their use. Using the literature at hand it was observed that many varieties may be roughly classified into stock vaccines and autogenous vaccines. These, in turn, were composed of numbers of organisms of the same group or diverse groups varying in number of component organisms from one to (in exceptional instances) eight to ten. These stock vaccines have in some few instances afforded desired results but no one has been keenly certain of nor enthusiastic over their use.

The autogenous vaccines have been more conscientiously exploited. These have unquestionably been autogenous in their preparation. The inevitable question, however, presents itself—"Was this autogenous vaccine specific for the etiological organisms?" If the vaccine is not specific it is scarcely within the most optimistic expectation to demand curative results. Such optimism would be comparable to a physician hoping to alleviate or prevent a bacillary dysentery through the use of an autogenous vaccine composed of *B. coli* isolated from the patient's stool. The vaccine would be truly autogenous and its component organism would certainly be the most profusely prominent organism observed in that bacterial flora. The picture above may be a bit far-fetched but from an impartial point of view, that is exactly the procedure which was and is being exacted in the average use of autogenous vaccine.

In the field of otolaryngology, the problem of securing a specific autogenous vaccine is scarcely less stupendous than the problem stated above. Even though cultures be made from the site of the lesion, the culture usually yields several organisms; and in the hands of the bacteriologist there has been no means to identify which organism is the etiological factor. To use all components of an isolation study as a vaccine is a rather indefinite and unscientific procedure. In a great number of instances where one organism is obtained there is no absolute knowledge available that other organisms are not overgrown by the sturdiest and most resistant. The point at issue is, how is it possible to make an autogenous vaccine which is in some measure applicable in treatment of infections.

With this object in view a study was attempted in the Clinical Laboratories of the Methodist Hospital, of Indianapolis. During the winter and spring of 1927 an extremely prevalent epidemic of coryza afforded some material for study. The cultures were from patients on the floors, nurses, and members of the laboratory staff. The total number at this time was twenty-two. The clinical picture varied only in degrees of intensity and extensiveness. In all of the cases cultured except one, the usual bacterial flora of the nasopharynx was noted, namely: *Diplococcus pneumonia* group IV, *micrococcus catarrhalis*, an occasional streptococcus, a rarely occurring diphtheroid, and

*Presented before the Indiana Academy of Ophthalmology and Otolaryngology at Indianapolis, December, 1928.

staphylococcus of the gama strain. The only organism common to all of these cases was the staphylococcus. This staphylococcus was a chromogen producing a bright golden color (yellow). This bright yellow pigment appeared in forty-eight hours at body temperature. On blood agar this organism showed a slight but definite hemolysis in four to five days. The organism measured about .6 micron in diameter. Being present in all the infected subjects and the only organism common to all, the obvious conclusion was that this organism was the etiological factor in the infection. The problem demanded an explanation. The approach of the problem appeared to present itself through the serological field. Complement fixation presented but meager prospects. Precipitative reaction offered a still more hazardous avenue of approach. Agglutination appeared to be the only feasible method. With this method of study in mind the bacterial flora was isolated in pure culture and separately and individually grown in liquid media—meat extract broth. The major number of this group of organisms were now motile so it became necessary to use twenty-four-hour cultures, eliminating all possibility of auto agglutination. The patient's sera in strong dilutions 1:5 to 1:20 were set up with controlled suspensions of the different isolated organisms separately. Positive agglutination reactions were negative in value for obvious reasons. Negative reactions were indeterminate. Suggestively positive clumping of the bacteria in these preparations were used as the criterion for selection of the etiological. All cases in this series showed a suggestive agglutination towards the staphylococcus common to all. No vaccines were used in these cases as they were of too short duration. This study, however, suggested possibilities in making a selective autogenous vaccine and the opportunity was afforded through two similar cases of chronic respiratory infection, limited to the nasopharynx.

CASE I.—Continuous discharge of muco purulent material from nasopharynx. Also profuse discharge of similar material from nose. Continuous series of colds through cold weather.

The autogenous vaccine was made by the customary method, composed of the most prevalent organism, which was a staphylococcus aureus gama type. This vaccine was given in graduated doses every four days until 1 c. c., containing four hundred million organisms, had been given for four successive doses. No selective agglutination study was done. Results: A decided decrease of symptoms, most especially of the change of the discharge from the mucopurulent to that of mucoid. At the end of seven months the discharge is present to some degree.

CASE II.—Chronic Ethmoid Sinusitis (characterized by severe headaches). Diagnosed by a leading otolaryngologist. Refused operation. Given permission to try vaccine. Bacterial flora were differentiated showing a staphylococcus and a

small micrococcus. Agglutination preparations on staphylococcus were negative. The micrococcus in agglutination preparations showed the suggestive clumping, but not definite. The patient's sera was taken at the time of culture from sinus and was used in the agglutination reactions. A vaccine was prepared of the suspension of micrococcus, strength 400,000,000 per c. c. and graduated doses were given over a period of three weeks with a complete cessation of all symptoms. This subject began last ten days, a selective vaccine of *B. streptococcus* of 400,000,000 per c. c. With the initial dose of sixteen million quite definite manifestations were experienced that supported the belief that the etiological factor had been secured.

ACNE VULGARIS

CASE I.—Rather marked eruption over face and back. Duration several years, accompanied by purpuration and scarring. Vaccine made February, 1927, according to usual methods of autogenous vaccine preparation; strength, 250,000,000 per c. c.

Dose: Graduated from fifteen million initial dose to two hundred fifty million over period of six weeks. Lesions showed some improvement, but continued to recur and are at present recurring.

CASE II.—Profuse eruption over face and shoulder. Eruption in pustular nodular form — many hard and indurated. Marked scarring of face. Cultures were made and all organisms differentiated. Strength of vaccine four hundred million per c. c.

Dose: Fifteen million initial dose Q, 4d. for six weeks. Marked improvement, lesions almost entirely cleared up. Indurated areas disappeared in a few weeks.

The cases mentioned previously are a few of a series of over fifty in number and were selected at random as typical of different types of lesions referable to the upper respiratory tract.

The fact that every case has shown quite definite improvement where the etiological organism was definitely identified points rather suggestively to the fact that autogenous vaccines as usually made are little better than stock vaccine. Some method for determining the specificity of the vaccine must be developed. The previously described method has been used with a certain degree of satisfaction by the author.

The method of administration of vaccines occasionally may be the direct cause of their failure to give the desired results. Usually the "negative phase" period following doses of vaccine is absolutely ignored and the second dose is administered during the phase which in a measure defeats the effectiveness of antibody formation.

Observations from a laboratory point of view have been that the most cumulative and effectual responses were acquired at the end of four days and not longer than eight days.

To sum up in a few words, the time interval is a rather important feature in vaccine therapy.

In regards to another element pertinent to the method of administration it is well to call attention to the numerical content of vaccine. The usual stock vaccine and the customary accepted autogenous vaccine contains as a rule two hundred fifty million of a single strain of organisms per c. c. In the smaller doses this has proved very satisfactory but for establishing rather advanced immunity the final doses become so large in volume that they become unnecessarily painful. The customary vaccines then become too dilute to accomplish the intended results. It has been the result of observation that the final doses of vaccine in a long series where a negativity or sensitization is being overcome, must be usually massive in order to secure the desired result in therapy.

A score or more of cases presented the opportunity—a few will be noted.

CASE A. Child eight years of age — infected ulcer of lower leg on lateral surface — duration six months. Ulcer deep, edges overhanging, dirty sloughing base irregularly round about six cm. in diameter. Very painful. Wassermann negative. T. B. fixation negative. Filtrate made and applied cutaneously every day for twenty days—wound clean-granulation almost to surface, wound healed by graft, improvement.

CASE B. Indolent decubitus ulcer over sacrum, exposing sacrum about six cm. long by four cm. by four cm. Filtrate made and applied. Granulations appeared healthy but no marked change seen. Fourth dose gave violent anaphylactic reaction.

CASE C. Furuncle on face, painful, indurated, swollen, beginning to suppurate. Such filtrate applied for six hours with almost instantaneous cessation of all symptoms. Twenty-four hours showed marked improvement and forty-eight hours revealed a complete cessation of inflammatory signs.

The work of T. B. Rice, of Indiana University Medical School, with filtrates has been unusually successful and the work is undoubtedly a praiseworthy endeavor. In his recent report of a series of cases Dr. Rice stated that Swan-Myers now make the filtrates in great quantities according to his technique. Control of this filtrate against our laboratory filtrates shows almost similar reaction.

CONCLUSION. The best result which may be hoped from autogenous vaccine therapy must come from the autogenous vaccine composed of the etiological organism. If the autogenous vaccine is not specific, expectation of a curative procedure may scarcely be realized. A selective technique is suggested which has been useful to the authors.

The failure in vaccine therapy outside of its lack of specificity may be ascribed to disregard of negative phase in patient's reaction and lack in massiveness of final doses.

True bacteriophage therapy — unquestionably established, is blatantly lacking in the literature.

Bacterial filtrate therapy is loosely called bacteriophage therapy. Results of this filtrate therapy have not been unusual in the observation of the observer.

GONORRHEAL INFECTIONS OF THE INTERNAL FEMALE GENITALIA

D. A. BICKEL, M.D.

SOUTH BEND

Neisser states that with the exception of measles, gonorrhea is the most widespread of all diseases. Certainly no disease is so widespread in its attack on the female genitalia. In this paper the discussion will be limited to the treatment of gonorrheal infections of the cervix and Fallopian tubes. The disease in these locations is more easily eradicated than in other parts of the female anatomy, namely, Bartholin's and Skene's glands.

As a cause of pelvic pain, backache and leucorrhea infections of the cervix take first place and they can also terminate in inflammatory processes in the upper pelvis. Their potentialities for malignancy should not be overlooked entirely although the evidence we have at present is not conclusive. Just how many infections of the cervix are caused by gonorrhea is difficult to state. But a great number, probably the majority, are the result of traumatism of childbirth and instrumentation.

The treatment of acute gonorrheal endocervicitis is essentially rest, drainage and cleanliness, which is the treatment of any acute gonorrheal infection. If at all possible the patient should be in bed in Fowler's position. Rest will tend to limit the infection and Fowler's position will facilitate drainage. Alkaline or mildly antiseptic douches which are warm and under low pressure will keep the parts clean and serve to apply local heat. Instrumentation and tampons are certain to do more harm than good. Diathermy has been used by some with reports which are favorable, while others, notably Polak,¹ have not observed any benefit in acute cervical infections. If treatment is not too radical the infection usually will remain below the internal os and localize in the cervical tissues where it becomes a chronic cystic cervicitis. Active treatment during the acute stage will tend to spread the infection to the upper pelvic structures.

Any treatment of the cervix to be effective must be based on the actual structure and pathologic changes involved. Two definite anatomical considerations are important here. First, the cervical canal is lined with mucus membrane which is composed of racemose glands with minute openings. These branching glands extend deeply into the underlying stroma. Second, the lymphatics of the cervix course up through the myometrium into the channels that accompany the uterine and ovarian vessels. Once infection is established in the glands of the cervix it will remain there latent for long periods of time and the lymphatic structure furnishes an excellent opportunity for infection to extend to the other pelvic organs.

The usual picture observed when the patient presents herself for treatment is a red, swollen cervix with erosions around the external os from which exudes a thick, tenacious, purulent discharge. Cysts may be seen beneath the mucus membrane. Prophylaxis here consists in prevention of upward extension early in gonorrheal infection. No doubt infection is often carried to the cervix by douches, examinations and local treatments. The purpose of any effective treatment of chronic cervicitis is destruction or removal of the infected glands. Douches are useful only to the extent of cleansing the vagina of the irritating discharge, thereby lessening the patient's discomfort. Local applications are obviously of no value and medicated tampons only interfere with drainage. Cauterization and surgery are today the accepted methods of treatment. Surgery is seldom, if ever, indicated in cases which are not accompanied by lacerations.

The technique of cauterization is simple. It can be done in the office without anesthesia. A cautery with a sabre point or a small nasal cautery may be used. The latter is to be preferred. Treatments should be given three to four weeks apart. One lip, preferably the anterior, is cauterized by linear incisions extending the entire length of the canal and permitted to heal before the other one is attacked. This removes the possibility of stenosis. It is to be remembered that the cervical glands extend the entire length of the canal and if these are not all reached by the cautery, we cannot expect a cure. Cysts are punctured and the cyst wall destroyed by the cautery tip.

The material for this study consists of 260 patients with proven or supposed gonorrheal infection of the cervix. Lacerations were also present in fifty-one cases. In four cases with deep multiple lacerations the Sturmdorf operation was performed. Of 241 cases whose subsequent course could be followed, 193 or eighty percent were completely relieved and thirty-two or thirteen percent were partially relieved of leucorrhea. Stenosis of the canal was not encountered, but quite severe bleeding occurred in a few cases deeply cauterized. In three cases of this series tubal infection was activated by the treatment. In six patients the cervix was cauterized thoroughly at the time of removal of the tubes. One patient of this group was not improved. If infection in the tubes is present the treatment is absolutely contraindicated.

As a prophylaxis against cervical cancer careful treatment is of greatest value. Pemberton² in a recent study has not found malignancy develop in any of the 1,408 cases which had been cauterized. Radium as a treatment for cervicitis was at one time advocated and is still used to a limited extent. Its expense, danger and the necessity of hospitalization of the patient render its use impractical particularly since equal results can be obtained by the cautery.

Infections of the Fallopian tubes are estimated to be due to the gonococcus in sixty to seventy percent of cases. Some gynecologists claim ninety-five percent. Acute gonorrheal salpingitis is entirely a medical disease. This was demonstrated conclusively by F. F. Simpson twenty years ago. At that time the mortality in operations for salpingitis was about twenty percent. He reported 400 cases operated on after the temperature had been normal for three weeks with a mortality of about one percent. Still there are a few surgeons of extraordinary skill and experience who do immediate surgery with apparent success. Such a course is followed by Campbell, in England, but is condemned by all American gynecologists. The study of the mortalities in any general hospital should remove all doubt as to the safest course. In addition to the mortality from operation, removal in the acute stage sacrifices many useful female organs.

As mentioned before, the majority of all tubal infections are due to the gonorrhea. It is a common observation that when the gonococci are encapsulated in these tissues their death is inevitable. It has been indisputably shown that there is direct correspondence between the growth of the bacteria and the clinical symptoms. Curtis³ has been unable to find any organisms in the tubes of patients who had no acute inflammatory process or who had a normal temperature for ten days. He also was the first to point out that exacerbations of salpingitis do not occur but reinfection takes place either from the lower genitalia or from without, and if unprotected sexual intercourse is not indulged in recovery after the first attack is to be expected.

From these accurate clinical observations we are led to conclude that acute gonorrheal salpingitis is a self-limited disease which is to be treated medically. Acute peritonitis and death as in appendicitis has never been observed. Rupture of a pus tube rarely occurs. It might be well to outline briefly the method by which patients with acute salpingitis are best managed. The cardinal principle is rest, and the patient should be in bed for two weeks after the temperature is normal. Either heat or cold may be applied to the abdomen, whichever gives the patient the most relief. Opiates may be given for pain, no cathartics are used. Fluids are forced and they can nearly always be taken by mouth. Douches may be given if they add to the patient's comfort, and surgery is limited to localized pus collections. Sexual abstinence is imperative.

The question now arises: When the acute process has subsided, should we resort to operation? Following the first attack I am sure we may well say, "No." Jeff Miller⁴ has said, "Wait until the infection is thoroughly cooled and then continue to wait." What he means is that if the patient is not reinfected, she will continue to be well. There is sufficient proof of these statements. In over

1,000 cases Holtz⁴ secured eighty-two percent clinical and twelve percent functional cures. Twelve percent of the patients became pregnant later. Curtis⁵ states that since 1921 in his clinic less than twelve percent of the cases have been operated. When surgery is undertaken it is for the reconstruction of tissues laid waste by repeated infections. It is never done to remove infection because nature will take care of that. In general, it may be said surgery should be reserved for thickened, adherent, and persistently painful tubes, persistent menstrual irregularities and displacements. Whether or not surgery is done, and to what extent, should depend upon the general health, age and social condition of the patient and to some extent upon her desires. In prostitutes and women whose husbands have chronic gonorrhea, reinfection is the rule.

As a guide to the safest time to operate there is no one criterion. The general clinical picture, the temperature, the leucocyte count and the sedimentation test should all be considered. Some discussion of the sedimentation test would be pertinent here. Briefly, the test consists of observing the speed with which erythrocytes separate from the plasma of the blood. This is one of the oldest laboratory procedures in existence.

The reason for the variation in the speed of sedimentation of erythrocytes remains unexplained. But it is a proven fact that the rate of sedimentation is markedly accelerated in patients suffering from infection of any kind anywhere in the body. And the phenomenon is due to changes in the plasma and not in cells.

The application of this test to gynecology was first made a few years ago by Linzenmeier in Germany. He found it useful in determining the presence or absence of latent infection in adnexal diseases where the temperature and blood count were normal.

There are two principal methods—the Westergren-Fahreus and the Linzenmeier. The Linzenmeier method is the most generally adopted. The technique which I have followed has been exactly that of Friedlander⁶ which conforms closely to Linzenmeier's.

Friedlander Technique: Here the necessary utensils are: (a) one c.c. hypodermatic syringe with 0.1 c.c. divisions; (b) sedimentation tubes of 6.5 cm. length and 5 mm. diameter, with a capacity of a little over 1 c.c. Below the 1 c.c. mark there are marks at 6, 12, 18 and 24 mm. These points are designated as I, II, III and IV, respectively.

Following are the directions:

1. The hypodermatic syringe must be perfectly dry or washed with a solution of sodium citrate.
2. Draw up 0.2 c.c. of the five percent sodium citrate solution into the hypodermatic syringe.
3. Draw into the same syringe 0.8 c.c. of blood, making the total contents of the syringe 1 c.c.

4. The sedimentation tube must also be perfectly dry.

5. Do not apply the tourniquet too long to the arm, or the blood will contain too much carbon dioxide or relatively too many blood cells, which will have a bearing on the time of sedimentation.

6. Mix the blood and the sodium citrate solution slowly in the syringe before transferring it to the tube, or mix it in the tube to prevent coagulation. The marginal level in the tube must be exactly at the 1 c.c. mark.

7. Note the time necessary for the blood cells to reach III (18 mm.). Marks I and II (6 mm. and 12 mm.) are for the purpose of computing the time, if the observer is in a hurry, but it is not advisable to use these readings. Mark IV (24 mm.) is used in case of a very rapid sedimentation of the erythrocytes.

8. Ordinary room temperature is satisfactory.

9. If the reading was neglected or uncertain, mix again and reobserve.

10. If the blood coagulates it must not be used. This occurs if the tubes are not perfectly dry or if they are washed in water containing lime salt.

In the accompanying table are the results of a small number of sedimentation tests made on normal individuals, patients with active infection and cases of "cooled" pelvic inflammation. One case in this series was of particular interest as it illustrates the value of the test. This patient in the past six months had had two attacks of acute gonorrheal salpingitis. She was referred to me when the temperature had been normal for two weeks. At this time the leucocyte count was 7,800 and clinically the indications were that the acute process had subsided entirely. The sedimentation time was twenty-five minutes. Because of this, the operation which was to be done the following day was postponed. On the following day the temperature was 101 and she again presented the picture of acute salpingitis. Three weeks later the sedimentation time was 105 minutes and the operation was performed without difficulty, and the postoperative course was uneventful. Had the test not been used, operation would have been done in the presence of acute infection. This test is considered quite valuable by many gynecologists, while others do not attach much significance to it. It is in no way specific, the settling of the cells is rapid regardless of the site or nature of the infection. This limits its diagnostic value, but it has some prognostic significance and is of some value in postponing elective operations. Although this is granted, the test should never replace or interfere with clinical observation.

Whatever operative procedure is decided upon the ovaries should be spared, if possible, especially in young women, for they are never involved if the tunica albuginea is intact. An ovary which is cystic or involved in a massive abscess may have to be removed, but the other may be saved. Polak⁷ has shown that where chronic inflammatory

changes are present in the tubes this condition is also present in the fundus uteri surrounding the pars interstitialis. Clinical results after removal of the fundus confirm this. In older women where the uterus is large and there is menorrhagia or metorrhagia, the best interests of the patient may be served by its removal. But in younger women the removal of the fundal portion of the uterus with the tubes is the choice operation of many gynecologists, notably Polak and Culbertson⁸. The operation is usually some modification of that devised by Bell⁹ and Beuttner¹. Following this, recovery is rapid and complete and menstrual function is preserved.

Dr. Jeff Miller⁴ has offered us guidance in the management of salpingitis in the following statement:

"In tubal disease almost more than in any pa-

thology of the female pelvis, the sanest surgeon, the wisest gynecologist is he who refrains longest from the practice of his art, but who, when he is obliged to exercise it, tempers his conservatism with sufficient radicalism to insure for his patient a permanent cure."

Summary:

1. The treatment of acute gonorrheal infections of the cervix is essentially rest, drainage and cleanliness.

2. Cauterization and rarely surgery are today the accepted methods of treatment of chronic cervicitis.

3. Acute gonorrheal salpingitis in the majority of cases is a self-limited disease.

4. The sedimentation test is a simple procedure which has some value in determining the safest time to do elective operations.

Type of Case	No. of Cases	Highest	Lowest	Average	W. B. C.	Temperature
Normal adults } Males and females }	21	1080 min.	139 min.	390 min.	Normal	Normal
Chronic salpingitis clinically "cooled"	52	120 min.	65 min.	117 min.	Normal	Normal
Acute salpingitis	23	65 min.	15 min.	44 min.		
Pelvic cellulitis	2	30 min.	30 min.	30 min.	8000-11000	Normal to 100.5°
Abscess of neck	1			35 min.	19,200	101°
Acute salpingitis and arthritis	1			15 min.	16,000	102°

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SPECIAL ARTICLES

NATIONAL PUBLIC HEALTH
CONFERENCE*

REPORT OF THIRD ANNUAL CONFERENCE

JAMES H. STYGALL, M.D.

INDIANAPOLIS

This meeting was held at the American Medical Association's building, Chicago. March 29 and 30, 1929, and had representatives of state health departments, volunteer health organizations, and state medical associations. Surgeon General H. S. Cummings of the United States Public Health Service presided.

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W. S. Leathers, M.D., Dean of Vanderbilt University Medical School, spoke on "How or in What Ways Can Official and Voluntary Health Agencies and the Medical Profession Best Cooperate in the Promotion of Public Health?" Some of the points that Dr. Leathers brought out are as follows:

(1) The future family physician will be the family health adviser and medical practice is becoming a practice of preventive medicine more than curative medicine.

(2) Medical schools are not instructing students in methods of public health agencies and the result is that students are not prepared to cooperate with health agencies and instruct their patients properly in health matters.

(3) Medical associations should be conferred with in public health administration by state and county health officers, and volunteer health agencies should cooperate with state and federal health agencies.

(4) There are seventeen different departments of the government dealing with public health and there should be coordination of governmental public health agencies.

(5) State medical associations should have a public health committee to cooperate with state health officers, and county medical associations should have an advisory committee for their county health officers.

(6) The most important factor in preserving the public health should be the teachings of the family physician.

(7) Health centers should be educational.

(8) Examination of school children should be part of the school program and should be done by school physicians. The correction of defects should be the function of the family physician.

(9) Diagnostic clinics by state health departments or voluntary health agencies should be entirely educational and should have the approval of local medical societies.

(10) The public should be educated that children age nine months should have diphtheria toxin-antitoxin. Vaccination for smallpox should be done at age three months. Typhoid vaccination should be given at age two years.

(11) Community hospitals have a great educational value for the local physicians and for the public.

(12) Out-patient clinics such as prenatal, tuberculosis, G. U., and infant welfare, should be part of every community hospital.

(13) Health departments should be scientific, not political, and competent administrators, adequately paid, should be in office.

(14) The American Medical Association should sponsor and encourage stabilization of state and local health departments. So-called state medicine will be prevented by supporting and stabilizing health departments.

Discussion of Dr. Leathers' paper by Dr. Guy L. Kiefer, state health officer of Michigan, from the standpoint of the official agency.

(1) Public health will be promoted by harmony between official and volunteer agencies, practicing physicians and medical schools.

(2) The private practice of medicine has become the practice of preventive medicine, particularly in pediatrics. This change of practice has not been emphasized in medical teaching.

(3) The county medical society should have a county nurse adviser. This would prevent misunderstandings between the county nurses and county physicians and increase the efficiency of the nurses' work.

Second discussion by Mr. Barry C. Smith of the Commonwealth Fund, New York, from the standpoint of the voluntary agency.

(1) Mr. Smith emphasized the importance of cooperation with the medical profession and official agencies. He cited some of the work done by the Commonwealth Fund at Fargo, North Dakota. A great deal of educational work was done there to promote immunization of children against diphtheria. However, it was found that the public would not do this voluntarily. This work was then done at public expense although it was not made compulsory. Mr. Smith believes that in the future diphtheria immunization work should be compulsory and at the public's expense to be successful.

(2) The voluntary agency's work should be

educative and should supplement the work of official agencies and the medical profession. At such time that their work has been completed they should disappear.

(3) Health centers should be educative and should cooperate by advising supervision by the family physician.

(4) The public should be educated to the value of health service by the family physician.

Discussion from the standpoint of the private physician by Dr. George E. Follansbee, of Cleveland:

(1) The medical profession is interested in public health and feels that it has been somewhat under criticism by health agencies. The profession is willing to cooperate but feels that the olive branch must be extended by the health groups. Sincere efforts at agreement will be successful.

(2) There are too many voluntary health agencies.

(3) Health administration should be in the hands of men familiar with problems of the medical profession.

(4) Health officers should be approved by medical associations.

(5) Health education is the function of voluntary and official health agencies and is better received from them than the medical profession.

(6) Preventive medicine is also a responsibility of the medical profession.

These papers were all discussed at the afternoon meeting and the general trend of the discussion of the papers was for cooperation between the medical profession, the voluntary health agencies, and the official health agencies.

The Indiana State Medical Association was one of few state associations represented at the meeting. The other states represented were Iowa, Kentucky, Minnesota, New York and Pennsylvania.

The state health officers and voluntary health agencies were well represented.

Surgeon General Cummings was re-elected chairman of the Conference for next year and he was instructed to appoint a committee of five representatives of the various organizations to bring in a cooperative plan for the various agencies which will be voted on at the next annual meeting.

On Saturday, March 30, the work of the Hygienic Laboratory at Washington was discussed by Dr. G. W. McCoy of Washington. Dr. McCoy discussed some of the important things that the Hygienic Laboratory had accomplished.

Pellagra has been studied thoroughly by Dr. Goldberger of the Hygienic Laboratory and found to be a vitamin D deficiency disease.

Typhus fever is endemic in the southeastern states and has been found to be the same as Brill's disease. It is a somewhat different typhus than is found in European countries and apparently is not transmitted by body lice.

Spotted fever which is transmitted by cattle

ticks can be prevented by a vaccine and also responds to vaccine treatment.

The Hygienic Laboratory has investigated smallpox vaccination complications and found 100 cases of tetanus following vaccination were all found in cases where shields had been used. Millions of men have been vaccinated in the army and navy where shields have not been used and no case of tetanus has ever been reported.

At the present time in Holland there have been a number of cases of encephalitis following vaccination which have not been explained. Anti-meningococcus serum has not been satisfactory as yet.

The Hygienic Laboratory standardizes various serums and vaccines produced by pharmaceutical houses.

An interesting fact was learned from Dr. McCormack, health officer of Kentucky. They have had a severe epidemic of scarlet fever in a rural district in Kentucky. The Drs. Dick from the Chicago McCormick Institute have been working to control this epidemic. Nine hundred cases of scarlet fever were treated by scarlet fever antitoxin without a death. Of the population given the Dick test only twenty percent reacted showing susceptibility to scarlet fever. The reactors were given the scarlet fever toxin-antitoxin with apparently very satisfactory results. It was found that only about fifty percent of the cases of scarlet fever developed the rash. In other words, all throats were cultured and only fifty percent of those showing hemolytic streptococcus had the typical scarlet fever rash.

Dr. Theobald Smith of Princeton, New Jersey, discussed undulant fever as a public health problem. Undulant fever or Malta fever is always from an animal source. In cattle the chorionic cells are the site of the infection and the organisms are carried by the circulation to the udder from which the milk may be contaminated. This organism was first found by Bruce at Malta in 1889 and it was not until 1905 that the British found that the disease was transmitted from goat's milk. In southern France it has been found that ewes' milk has been the source of the disease. The specimens that Dr. Smith has examined have been traced to swine and in most cases it is transmitted by the raw meat coming in contact with finger cuts, etc. This organism after drying for six weeks will infect guinea pigs. He thinks the disease is on the decline in cattle.

DISEASES OF BONE

DR. BLOODGOOD'S CLINIC AT RILEY HOSPITAL

On the invitation of the Indiana University and the Riley Memorial Association, Dr. Joseph Colt Bloodgood, of the Johns Hopkins Medical School, visited the Indiana University School of Medicine and the hospitals in Indianapolis on December 7, 1928.

In the afternoon Doctor Bloodgood held two

clinics in the medical school auditorium, the first for medical students and physicians, the second open to the public. The cases presented were children from the James Whitcomb Riley Hospital, displaying various diseased conditions of bone. These clinics were intensely interesting and were well attended, the second one, open to the public, attracting a large group of nurses, social workers and others interested in the activities of the Riley Hospital.

At the first clinic Doctor Bloodgood, in presenting two children with multiple chondromata of bone, called attention to the following features: These conditions are best considered as congenital defects even though the deformities may be somewhat slow in appearing. They usually occur in numbers about the joints of hands or feet, but are often found in the ends of long bones and in numerous parts of the skeleton. Due to their relationship to epiphyseal cartilage, radical surgery may result in marked irregularities of bone growth and is therefore contra-indicated in the growing child. In some cases, however, the growth tendencies of these tumors are such that neglect may result in serious deformities. Systematic x-ray study gives the best guide to treatment and prognosis.

Passing to the subject of tuberculosis in bone, Doctor Bloodgood placed his chief emphasis upon prevention. It is fairly well understood that tuberculosis of bones, lymph glands and peritoneum is chiefly of the bovine type. With this knowledge at hand our attention to the tuberculin testing of cattle and the pasteurization of milk should offer effective means of prevention. It is already a significant fact that the incidence of bone tuberculosis is on the decrease. The importance of elaborating our efforts in this direction is obvious.

In diagnosis Doctor Bloodgood called attention to the fact that tuberculosis attacks the epiphyseal ends of long bones, and the red marrow of small bones such as the vertebræ. Pain is elicited with joint motion, and actual joint involvement with stripping of the cartilage comes early in the process. Early diagnosis and treatment offers the only means of preventing serious deformity, and furthermore with far advanced tuberculosis of bone, accompanied by secondary infection, a cure may be impossible.

Rickets, Doctor Bloodgood contends, should be wholly and easily preventable by proper diet in the mother and child, and the administration of cod-liver oil to all infants and children. In this condition also the x-ray is the best guide in establishing the diagnosis.

In the discussion of a case of chronic osteomyelitis, the importance of blood transfusion was emphasized. This measure offers a most valuable means of increasing resistance to infection and thus hastening the recovery. In commenting further Doctor Bloodgood laid stress upon the importance of an early diagnosis in acute osteomye-

litis. The local signs of suppurative inflammation in bone must be the indication for early drainage of pus in order to minimize the periosteal stripping and the sequestration which follows.

For the second clinic of the afternoon, Doctor Bloodgood presented these same children to a different audience. This presentation being open to the public, the various subjects were discussed from a less technical point of view. Emphasis was placed upon child hygiene, the prevention of disease, the proper attention to injury and prevention of deformity.

The full prevention of rickets begins with the mother's diet and continues through adult life. The most essential foods for the expectant mother, the nursing child, the infant and the growing child are cod-liver oil, milk, green vegetables, butter and full grain breads. Cod-liver oil becomes more important as we must use pasteurized milk. It is most important in the winter months when sunlight is scarce. In tuberculosis, prevention lies in proper environment and proper milk. In osteomyelitis preventive measures must include care of the teeth and tonsils to rid the child of these foci of infection.

Concerning the host of ailments and injuries of childhood, for which we have little to offer as means of prevention, Doctor Bloodgood emphasized to the laity the great importance of early medical consultation. The physician thus consulted should consider himself morally obligated to avoid errors of omission. An apparently trivial ache or pain may be the prodromal symptom of a serious bone disease.

A scientific lecture presented in the evening, profusely illustrated with lantern slides and microphotographs, dwelt upon the subject of benign and malignant tumors of bone. Doctor Bloodgood, in his introductory remarks, stressed to his professional audience the fact that we are living now in an age when laboratory methods and instruments of precision are available for early diagnosis. Of

these, the x-ray is perhaps the most important in the diagnosis of bone tumors and bone disease in general. But with this and all other aids employed, correct differential diagnosis may be a matter requiring wide experience and the most careful study. Syphilis, chronic sclerosing osteomyelitis and sarcoma may at times seem indistinguishable.

In commenting further upon sarcoma Doctor Bloodgood laid stress upon the frequency with which a single trauma to bone or muscle appears as a salient etiological factor in the formation of the tumor. His theory of the origin of certain bone tumors takes this into account as follows: It appears that when granulation tissue is deposited deep in the tissues or in bone, as a reaction to injury, and remains uninfected, there is in rare instances a tendency for the fibroblast to acquire neoplastic properties. The result is a tumor which may be benign or malignant according to the degree of anaplasia or abnormal growth tendency in the cell.

Of benign tumors which seem to have such a basis there are chiefly two, the benign giant cell tumor and the bone cyst, the latter being the most common tumor of childhood. The factors which are immediately responsible for the occasional development of sarcoma are not at present understood. Our chief concern must rest in early diagnosis. The difficulties of this have been mentioned. Often diagnosis is impossible without the aid of a microscopic section and even then there may be doubt.

A good general rule of treatment takes this into account. In benign bone tumors, radical amputations are unnecessary and therefore contraindicated. If the tumor is malignant, radical and mutilating operations avail nothing. The indications for simple curettment, resection or amputation depend upon the nature and location of the tumor. In any case the rule is conservatism.

—H. M. T.

Smith went every night to a pool room to play for ten cents a point. One night Mrs. Smith was awakened by loud and persistent knocking at her door. Putting her head out of the window she asked: "Who is it? What do you want?"

"Does Mrs. Smith live here?" asked the man on the step.

"I am Mrs. Smith," she replied.

"Well, I'm Mr. Kelly from the pool room up the street. Your husband shoots pool there every evening."

"Yes, I know that."

"He was shooting tonight and lost \$1,500."

"My husband lost \$1,500 shooting pool? He ought to drop dead!"

"That's just what he did, madam. Good night!"

Illinois Med Jour., Feb., 1929.

Mother—"Come here, Johnny, I have some good news for you."

Johnny (without enthusiasm)—"Yes, I know, brother is home from college."

Mother—"Yes, but how did you know?"

Johnny—"My bank won't rattle any more."

Wife: "Do you know what day this is? It's twenty-five years ago to-day since we became engaged."

Absent-Minded Professor: "Twenty-five years! Why didn't you remind me before? It's high time we were getting married."

Father: "How is it that you failed on every subject at school?"

Son: "I had an absent-minded professor and he forgot to pass me."

THE JOURNAL of the

Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

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Editor and Manager

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EDITORIALS

TUBERCULIN AS A DIAGNOSTIC AGENT

In the foreign clinics tuberculin as a diagnostic agent seems to retain its popularity if we can judge by the reports brought back home by American physicians. However, in this country there has been a growing distrust, or perhaps we might say apathy, concerning the value of tuberculin as a diagnostic agent, as evidenced by the scanty or even unfavorable attention given the subject by various writers in medical journals as well as textbooks. The test generally is employed in two forms, first, the von Pirquet vaccination test, and second, the subcutaneous test. A third test, the Calmette eye reaction, seems to have been discredited because of its danger.

The Pirquet test is chiefly useful in children under five years of age, and recently Pirquet (*Jour. of the Amer. Med. Assoc. of Vienna*, December, 1928) insists that his technique should be followed. He always uses the original old tuberculin of Koch, undiluted, two drops of which are placed on the skin about three inches apart, and scarification without bleeding made through the droplets. Between these there is an abrasion used as a control, and the control abrasion is not covered whereas the other abrasions are covered with cotton and adhesive and left untouched for forty-eight hours. During the forty-eight hour interval the temperature is taken every four hours for the purpose of noting the development of fever. If there is a reaction in which the scarified test spots appear double in size, the test is considered positive. If the three spots are alike the test is negative and the child is considered free from tuberculosis. However, a rather remarkable admission of Pirquet is "to be positive in excluding tuberculosis the intradermal method is used, in which one-tenth c.c. of a solution of old tuberculin 1-to-1000 is introduced into the skin. If this intradermal injection shows no reaction after forty-eight hours then a second injection of ten times its strength is made, and it also is repeated at the end of forty-eight hours if the test is still negative. If all the tests are negative the patient is considered free of tuberculosis, with the exception that it would not be conclusive for

tuberculous meningitis, or exhaustive pulmonary tuberculosis in the last stages, or for a tuberculous child in the first stage of measles, or for one who had been immunized by a series of tuberculin injections." Pirquet previously had stated that ninety percent of persons over fourteen years of age give a positive reaction, indicating a tuberculous lesion somewhere in the body, but tells us nothing as to its activity.

The subcutaneous test is the one that should be used in adults, but the patient should be afebrile at the time the test is given, for a rise in temperature is one of the most important signs of a reaction. An injection of one milligram of Koch's old tuberculin is given subcutaneously, preferably at nine p. m., so that the reaction which usually takes place within eight or nine hours will not occur at night and so escape notice. If no reaction occurs within forty-eight hours three milligrams should be injected, and if in forty-eight hours more there is no reaction five milligrams may be given. If no reaction occurs, active tuberculosis may be assumed to be absent. Besides the rise of temperature there frequently develops, if tuberculosis is present, a local reaction at the site of the injection. The subcutaneous tuberculin test in the doses indicated is without danger and can be employed safely. It is generally recognized as the most reliable of all the methods of using tuberculin for early diagnosis. However, as pointed out by numerous clinicians, it is to be remembered that a reaction only indicates that there is a tuberculous focus somewhere in the body. It does not tell where it is or whether or not it is active and treatment is required. With other evidence of active tuberculosis it renders the diagnosis more certain but does not make it positive. A failure to react, after a thorough trial, either gives us a probable assurance that no tuberculosis exists, or that the disease is so far advanced that the reactive forces of the body have lost their power. Contra-indications to the subcutaneous tuberculin test as given by Caille (*Post Graduate Medicine*) are, certainty of diagnosis, fever, recent hemoptysis, advanced heart or renal disease, epilepsy, diabetes and convalescence from a severe infection.

Unfavorable opinion concerning the test is given by various writers in medical journals as well as textbooks. Thus, Finnoff (*Ill. Med. Jour.*, March, 1929), in discussing the difficulties in diagnosis of tuberculosis of the eye, says: "Tuberculin as a diagnostic agent is unreliable. It may aid in some cases. Focal reactions in tuberculous cases are not specific but may occur after the injection of foreign proteins other than tuberculin. A diagnosis usually must be based on the history, clinical appearance, and course of the disease. If a focal reaction occurs after the injection of diagnostic doses of tuberculin it is merely additional evidence." This seems to be the rather generally accepted opinion, and is in keeping with the statement of Bonney in his book, *Pulmonary*

Tuberculosis and Its Complications, which is as follows:

"While the legitimate scope of the tuberculin test when employed subcutaneously for diagnostic purposes is extremely small and its field of usefulness confined to doubtful cases otherwise incapable of precise determination, it, nevertheless, is safe to conclude that its intelligent employment in this manner is not only harmless but possessed of a high degree of diagnostic value."

Despite the favorable opinion concerning the value of tuberculin as a diagnostic agent, entertained by many of our foreign confreres, it must be admitted that the experience and opinion of many of our foremost clinicians in America justifies the average physician in finding little incentive or encouragement to employ tuberculin as an adjunct in the diagnosis of tuberculous lesions. We are advised that at the Saranac and several other tuberculosis sanatoria or camps the tuberculin test is not used at all, and for the reason that the test does not tell the competent and experienced examiner anything that cannot be determined in a more definite way by other means. When all is said and done the interpretation of the clinical manifestations is of more importance than anything else, and to quote an aphorism of Brown, of Saranac Lake, "No modification of the tuberculin test is yet devised which differentiates clearly clinical tuberculosis which demands vigorous treatment from non-clinical tuberculosis which requires only a God-fearing life."

TARIFF ON INSTRUMENTS

On several occasions THE JOURNAL has commented upon the unnecessarily high price of surgical instruments. It is admitted that there are certain special instruments, and those requiring considerable hand work, that require a price sufficient to cover cost of production. However, there are many standardized instruments that cost far more than is necessary for a fair profit to the producer. The particular reason for the high cost of instruments in general is the tariff, and it is well known that the very highest grade of surgical instruments may be purchased abroad for far less than the same instruments cost here in the United States. At present we are paying an ad valorem duty of forty-five percent and no specific duty on surgical instruments. Recently a representative of certain American manufacturers of surgical instruments, he himself receiving fabulous prices for all instruments he manufactures, has proposed an increase of the tariff, and recommends that the forty-five percent ad valorem duty paid at present be increased to seventy-five percent, and that in addition a specific duty varying from twenty to forty percent be levied.

If the proposed legislation is carried into effect it would mean that the cost of instruments in the United States would be increased by 133 to 344

percent over present prices. As has been stated by one of the opponents to the bill, the proposed enormous increase in duties on surgical instruments will benefit only a few who now are very prosperous without this increase, and to the serious disadvantage and great expense of a very large number who cannot afford the burden. The few who would be benefited would be a small number of American manufacturers and a very small number of workmen who would be engaged in the manufacture of the instruments. It is estimated that not over one thousand skilled workers would be required to manufacture the surgical instruments and accessories that now are imported and under a higher tariff might be manufactured in the United States. On the other hand the ones who would bear the burdens of the increased expense would be 150,000 physicians, 50,000 dentists, 10,000 hospitals, and an undetermined incidental demand from medical students and others. The higher prices of instruments would increase the expenses of surgeons and physicians, dentists, hospitals and students, or even make the purchase of many instruments impossible by excessive cost. Naturally this would necessitate larger fees and charges which would be an additional burden on the sick and injured when they are least able to bear it. Even the indispensable hypodermic syringe, under the proposed tariff, would be increased in cost by an average duty of 235 percent as against the present sixty-five percent.

We confess that we have been strong for protection in the interests of the American laborer, but there is such a thing as too much protection or too long continued protection. The surgical instrument industry in America long has had the advantage of a very high protective tariff, and it is a well-known fact that only a few of the American manufacturers produce instruments that can compete in quality with some of the instruments of foreign manufacture, and yet the prices upon the inferior article are unreasonably higher. Furthermore, it also is recognized that not a few of the American surgical instrument manufacturers have grown rich at the game. For many years we have claimed that the price of surgical instruments was altogether too high, due to the high tariff. and if Congress is going to do anything concerning the matter we hope that it will be in the direction of lowering the tariff instead of increasing it as proposed by the American manufacturers. Already the tariff is high enough to offer reasonable protection to American manufacturers and if they cannot survive under that tariff then let them perish.

INDIANA SPECIAL TRAIN TO PORTLAND

The executive committee of the Indiana State Medical Association has made arrangements for an Indiana special train to the Portland session of the American Medical Association to be held in

Portland, Oregon, July 8 to 12, inclusive. The special will leave Chicago at 11:50 p. m. on Thursday, June 27th, and goes by way of the Chicago and Northwestern, Union Pacific, and Canadian National Railway systems. This arrangement offers an opportunity to combine business with pleasure and with the advantage of all modern conveniences known to railway travel, and low rates afforded by party travel. Last but not least is the congenial companionship of fellow physicians, their families and friends. On the way to Portland the train will pass through Denver, Salt Lake City, and make a complete tour of Yellowstone National Park. At Hood River some of the largest apple orchards will be visited. The return trip includes Tacoma, Rainier National Park, Seattle, Victoria, Vancouver, and Jasper National Park in the Canadian Rockies. All arrangements are made in advance, and an escort accompanies the party to see that the plans adopted are carried out in every detail. It is an all-expense tour and involves every item of expense from Chicago to Portland and return, with the exception of meals while in Portland. Those who anticipate making the trip are asked to communicate with Thomas A. Hendricks, executive secretary of the Indiana State Medical Association, 804 Hume-Mansur Building, Indianapolis. Arrangements have been made for the golfers to play at several stops on the going and returning trips.

AGAIN DR. KING

Much has been said in the newspapers concerning the probability that Governor Leslie will ask for the resignation of Dr. W. F. King as secretary of the State Board of Health. Up to this writing Dr. King remains in office, and so far as we know has not been asked to resign. A few years ago an effort was made to displace Dr. King and at that time we felt, and so stated in *THE JOURNAL*, that we thought there was no good and sufficient reason for removing him. There is no reason why Dr. King should be fighting more or less constantly to save his official hide, and he would not be on the anxious seat if he ceased to "rub the fur the wrong way at the wrong time." He justly merits the unfriendliness and even antagonism of many prominent medical men in Indiana because of his failure to seek more often the advice, counsel and support of the medical profession, and to listen to some very wise counsel of his friends. The fact that he has had a few bumps does not seem to change him, but why should it be necessary to knock a man unconscious in order to get an idea through his head. While he denies it, we still believe and have reasons to know that he leans toward state medicine, and with the regular medical profession that is a good deal like flashing a red flag before a bull. However, as we have said before and say now, Dr. King on the

whole has been a very efficient and progressive state health officer, and we do not think he should be removed from office unless he continues to spurn suggestions and advice. We do believe that the governor ought to appoint as members of the State Board of Health some prominent, well-balanced medical men who have and merit the respect and confidence of the general medical profession of the state, and with the distinct understanding that while Dr. King is not to be curbed in any of his efficient and progressive methods already put into effect, he must be guided by his board and, as a purely personal suggestion to Dr. King himself, we suggest that he assume a more friendly attitude toward the medical profession as a whole and give respectful attention to constructive criticism. We believe, as we have stated before in *THE JOURNAL*, that there should be a closer affiliation between the Indiana State Medical Association and the State Board of Health, the medical department of the University, and the State Board of Medical Registration and Examination. All of these organizations ought to work in friendly cooperation.

MISLEADING CIGARETTE ADVERTISING

The food and candy manufacturers are entering a very righteous and just protest against the vicious and misleading cigarette advertising which offers as a slogan, "Reach for a Lucky instead of a sweet." The offending advertising ought to be suppressed in the interests of public health, for the suggestion offered to smoke rather than eat is apt to encourage the harmful use of tobacco and discourage the use of real food. The plea to young women and girls to try to secure or maintain a slim and willowy figure through the use of tobacco also is positively vicious. Furthermore, it is such fool advertising that gives the anti-tobacco societies encouragement to renew their efforts to prohibit the manufacture and sale of tobacco in any form, and if such harmful propaganda is permitted to continue it may be possible that some time in the near future we will be confronted with a proposed amendment to the Constitution that will be analagous to the eighteenth amendment, which went over before we hardly knew what was going on.

THE New York State Department of Health reports fourteen cases of smallpox in one family, none vaccinated. No doubt the community in which these cases occurred is now well vaccinated.

THIS is the season for dogwood blossoms and vandals. Why not let the blossoming trees and wild flowers alone? This suggestion is as good for the members of the physician's family as anyone else.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

SCARLET fever antitoxin seems to have secured the endorsement and favor of many German physicians, but so far as we have noted, no credit is given to American investigators for the wonderful work that has been done in prevention and cure of scarlet fever.

It is a good thing to lock the stable before the horse is stolen and also a good thing to exclude commercial propaganda from the programs of our county societies. The warning may be a little late, but it is hoped that societies that have not been victimized already will take warning.

RECENT experience would seem to indicate that except on very rare occasions it is a good rule for county societies to be very careful about permitting an outsider to read a paper without first inquiring whether he is a practicing physician and in good standing with his local medical organization and the A. M. A.

In Evansville the physicians have organized an association to protect physicians and dentists from professional dead beats. The company is to be known as the Professional Business Bureau and is incorporated. There is no reason why every populous community should not have a credit rating system for physicians.

FINGER print identification of infants in hospitals in which they are born is required in some states. It is not a bad idea. Certainly some trustworthy method should be adopted in every maternity hospital to avoid switching of babies either intentionally or unintentionally as has happened in some institutions with resulting legal complications.

FOR the fourth time the chiropractors have failed to secure legal recognition in Ohio. We take our hats off to the medical profession of Ohio, which put up such a valiant fight to compel the pseudo-medical cults to conform to the same legal requirements for the practice of medicine as are exacted from members of the regular medical profession.

WE commend to our readers Dr. Stygall's report of the public health conference held in Chicago late in March, printed as a special article in this number of THE JOURNAL. It shows some of the sidelights of the relationship of the medical profession to the work of public health officers and indicates that there is room for greater cooperation with mutual benefit.

THE State Board of Health now furnishes free serum for the treatment of tetanus, diphtheria, and rabies to be used in indigent cases. It is up to the individual physician to secure payment for services rendered, and it is our opinion that reasonable fees for attention upon indigent cases should be paid by the community through its municipal or county treasurer.

THE April number of the *Indianapolis Medical Journal* is given over to a discussion by prominent clinicians of Indianapolis of the value of sodium amytal as a general anesthetic, and the praise accorded ought to be highly satisfactory to the originators of the new anesthetic. The first or preliminary report concerning sodium amytal appeared in this journal in February, 1929.

No physician should work on a salary for any considerable length of time, as he gets into a rut and gradually becomes obsessed with the fear that if he goes out independently he will not earn a living. Salary is all right at the start, but some other arrangement whereby the physician goes on his own or shares in the return for his labor should be made early in a young physician's career.

WESTERN Canada is advertising for physicians who are willing to accept reduced rates, and a correspondent of the *Canadian Med. Assoc. Jour.* asks, "Why do some communities consider that a physician should accept \$2,500 a year when school inspectors receive \$3,000 per year and expenses, and deputy ministers about \$5,000?" The answer is not hard to find. Physicians as a class long have been suckers ready to bite at any bait.

THE American Birth Control League, sometimes referred to as the A. B. C. League, evidently has not familiarized itself with the remaining letters of the alphabet so far as the New York police are concerned. A newspaper announcement states that the police raided the Birth Control Clinic in New York and closed it. Presumably it was the A. B. C. clinic, as the article says, "There is only one birth control clinic in New York. The police found it and closed it."

A BULLETIN of the New York State Department of Health, under date of April 13th, declares that running water does not purify itself and that there is no way to tell by the appearance of water whether it is safe to drink or not. Therefore,

tourists, campers, picnickers and others are warned to carry water from home when taking to the road, and not depend upon running streams or brooks no matter how swift the water may be flowing or how cold the water.

IN connection with the scrap now on in Chicago between the free clinics and the medical profession, the Chicago *Tribune* takes delight in saying "Siccum." However, that influential lay newspaper does not hesitate to edit carefully and even delete argument that is favorable to the medical profession. Well, if the medical profession will buckle on its armor it can put up a powerful fight in the interests of fair play for the medical profession and justice to the public.

THE officers of every county medical society in Indiana should read the article on contraception by Dr. W. N. Wishard, of Indianapolis, published in this number of THE JOURNAL. Dr. Wishard has been quite temperate in his condemnation, and as his opinion is respected by every medical man in Indiana we hope that his article will be the means of heading off this man Cooper, who not only is spreading some rather vicious propaganda but apparently is commercializing his talk.

IT is announced that the Christian Scientists will build a million dollar sanatorium in San Francisco. If what goes on in the institution is anything like that reported as occurring in the Christian Science Sanatorium at Brookline, Massachusetts, there will be ample opportunity for a charge of criminal negligence in the care of many cases. The Christian Scientists have a way of practicing numerous forms of deception to cover up some of their inhuman practices.

A FLORIDA colored caddy showed signs of sleeping sickness when he had to be awakened as the golfer for whom he was carrying the clubs drove off for the first time. However, the caddy showed enterprise when he ran as fast as he could to the ball, where he lay down and was sound asleep until the golfer aroused him, when following the next drive the same performance was repeated. When reprimanded for his slumbering, the caddy answered, "Boss, I'm paid to carry the bags and find the ball and I'se doing that."

GOVERNOR LESLIE seems to be anxious to be responsible for efficiency in our state government in its various enterprises. We sincerely hope that when it comes to appointments upon boards in which the medical profession is interested, or which has to do in any way with medical affairs, the governor will select reputable and well-qualified physicians, and we believe that he can do no better than be guided in his appointment of regular physicians by the advice of the officers of the Indiana State Medical Association.

FROM New York comes the announcement that former Senator Nathan Straus, Jr., has imported for experimental purposes a new anti-tuberculosis vaccine, the formula of which is the work of Dr. Albert Vaudremer, formerly connected with the Pasteur Institute of Paris, and now one of the heads of the Hospice de la Salpetriere of Paris. The vaccine is not a cure for tuberculosis, but the claims for it are that it tends to immunize possible victims. It will increase the resistance of those who are infected or threatened with the disease.

A MEDICAL society in Tennessee is opposing certain advertising being used by cigarette manufacturers in a resolution which declares that, "The pernicious practice of advocating cigarettes in place of wholesome food should be condemned, and steps should be taken to prevent the dissemination of this form of advertising which is detrimental to public health." We are just wondering what the national society organized for the purpose of promoting "truth in advertising" has to say about some of the cigarette advertising now seen in lay publications.

THE scrap over the social and official standing of Mrs. Gann, the sister of the vice-president, is rather disgusting to all those who are not mixed up in the scramble for recognition in Washington official society. The controversy seems to be almost as important as was the question of the United States joining the World Court. Now what is to become of Mr. Gann? He might as well jump into the Potomac, for he will get cold comfort out of taking a snack at home or patronizing a cafeteria while his wife is gallivanting out nightly to attend diplomatic dinners.

Ho, hum! The baby shows have started again. They aren't worth three whoops in promoting health, but they do start a lot of rivalry among envious mothers. Incidentally, the shows wouldn't amount to anything without the services of physicians who, as usual, are "the goats" because they donate valuable time and valuable information. Perhaps physicians who make examinations for better-baby contests think they will profit by contacts made, but we doubt it. Judges in a stock show are paid, but not so the physicians who render expert services in the baby shows.

THE Indiana State Medical Association joins with other state medical associations and the great parent body of the American Medical Association in opposition to the Newton Bill and earnestly urges every county medical society in the state to take suitable action in opposition to the bill and furnish our representatives and senators in Congress with the result of such action. Remember, as so often stated in connection with this whole mat-

ter, medical problems should be met by those who have had a thorough medical training and should not in any way be supervised by laymen.

RECENTLY an Indiana health officer was heard to remark that he had no faith in the preventive treatment of diphtheria, and he did not use or recommend toxin-antitoxin. Is it any wonder that we do not wipe out diphtheria when health officers are so slow in accepting an established truth? Toxin-antitoxin as a preventive measure is past the experimental stage and has received the endorsement of practically all progressive physicians in larger cities. To talk about the questionable effects of toxin-antitoxin is like talking against the preventive effects of smallpox vaccination.

THERE is a real-for-sure smallpox epidemic in certain parts of England and in consequence a rush by the majority of the people to be vaccinated. As Arthur Brisbane well says, "It takes a smallpox epidemic to cure anti-vaccination nonsense." The present smallpox epidemic in England points unerringly to the value of vaccination, for practically all of the smallpox cases occurred in either unvaccinated persons or those who were vaccinated many years ago. On the other hand the recently vaccinated persons exposed to the disease did not contract it.

ALL praise to the Indianapolis Better Business Bureau in its efforts to secure a revocation of the license of the superintendent and proprietor of the Indianapolis Cancer Hospital who is charged with guaranteeing cures and collecting exorbitant fees from patients. If the medical society in every community that maintains a better business bureau would take out a membership in its better business bureau, much would be accomplished in suppressing quackery and in changing the character of medical advertising in the lay press which, as we all know, is for the most part fraudulent in character.

THE Chicago scrap over free clinics as well as clinics for those of moderate means, together with the controversies that are occurring in various sections of the country over the abuse of medical charity, is giving us a great kick, for we have been trying to tell the medical profession something about the way the wind is blowing and our messages have fallen upon deaf ears. At last the worm is beginning to turn, but it is a little late to accomplish what could have been accomplished long ago had the subject been given serious consideration at an earlier date. Perhaps it is better late than never!

A FEW months ago THE JOURNAL commented on the untrustworthiness of the Academy of Nursing, located in the Medical Arts Building of Fort Wayne. Subsequently the manager came to see

us and pleaded that we had made a mistake in saying that any unfair tactics were used in disposing of their courses of nursing instruction. Now comes the Fort Wayne *News-Sentinel* of recent date saying that Arthur Goodman, of the Academy of Nursing in the Medical Arts Building of Fort Wayne, has been arrested on a fugitive charge, and is wanted in Jackson, Michigan, for embezzlement and larceny. He is charged with having sold worthless stock.

PHYSICIANS may join with others in kicking about the four-cent gasoline tax imposed by the last Indiana legislature, but they should consider themselves well off if they think of some other states that have a tax of five and six cents per gallon. In reality we do not object to the tax of four cents per gallon on gasoline that we are held up for here in Indiana, providing the tax in its entirety goes for the erection and upkeep of good paved roads. Unfortunately we have reason to believe that much of the money raised by the gasoline tax is diverted to other channels than cost of erection and upkeep of roads, and that is where the imposition comes in.

PLANS for the Evansville session of the Indiana State Medical Association are developing rapidly. Following a rather general demand from members, the Association will go back to the old plan of having general and section meetings. All papers or addresses, with the exception of those given by guests, will be limited strictly to twenty minutes. Discussants will be limited to five minutes. The Evansville medical profession is on its tiptoes in an effort to put on one of the best sessions ever held, and the officers of the Association report an unusual demand for places on the scientific program. A preliminary program will be published in THE JOURNAL at a very early date.

AN epidemic of scarlet fever in the rural districts of Kentucky has been controlled through the work of the Doctors Dick from the Chicago McCormick Institute. Nine hundred cases of scarlet fever were treated with scarlet fever antitoxin without a death. Of the population given the Dick test, under twenty percent reacted showing susceptibility to scarlet fever. The reactors were given the scarlet fever toxin-antitoxin with apparently very satisfactory results. It is fortunate that we now have a specific for such a serious disease as scarlet fever, which now with antitoxin treatment ought to be wiped out just as we are wiping out diphtheria by diphtheria antitoxin treatment.

It is fortunate that the incoming president of the A. M. A. has recognized the growing tendency on the part of lay organizations to assume the task of furnishing medical and surgical services to the public, and dictating to the medical profession how, where, and under what terms and

conditions such services shall be rendered. Organized medicine must recognize the perils that confront it through the possibility of losing independence, and individual physicians becoming salaried employees unless something is done to meet the conditions by way of furnishing the services that the public needs and should have but under the control and guidance of the medical profession itself rather than by outside interests.

WE have received a complaint from a national advertiser to the effect that we have condemned a product that has been endorsed and recommended by many prominent medical men. We smile when we think of the endorsement of certain physicians, knowing full well that an opinion from many physicians may be obtained for advertising purposes at no more expense than entailed in the inquiry and stamp for reply. The worst feature of this endorsement business is that the average endorsement is not founded on experience or knowledge, but is given as the result of the opinion of someone else, or guess work, though possibly occasionally through a desire to secure publicity. When will physicians stop giving testimonial letters?

IT is the duty of every community to care for its indigent by way of furnishing medical and surgical services just as much as it is the duty of that community to furnish food, housing and raiment if needed, and pay a reasonable amount for it. In other words, there is no logical reason why the medical profession should bear the burden of furnishing medical and surgical services gratuitously to the poor of any community any more than grocers should be expected to furnish food gratuitously for the poor of that community. This whole subject has been discussed in *THE JOURNAL* from time to time and we will continue to discuss it in the future in the hope that some tangible solution of the problem confronting us may be found.

IN attempting to be democratic and independent Mrs. Hoover may drive her own car without insignia or secret service escort, but her husband or someone else ought to prevent her from exhibiting such foolhardiness. She might get caught in a traffic jam, or an accident occur to her which could be prevented with the precautions that ordinarily are used in protecting the wife of the president of the United States. An accident to Mrs. Hoover undoubtedly would unnerve the president and perhaps interfere in a very serious way with his functioning as head of the greatest nation on earth. Therefore, the wife of Mr. Hoover as president is far more important than the wife of Mr. Hoover as a citizen, and she should be accorded unusual protection through secret service escort.

THE attorney-general under President Harding, in a published statement, denies the gambling, drinking and women-chasing attributed to President Harding in two notorious and widely read books published after President Harding's death. We always have felt that it was a cowardly and despicable act on the part of both authors and publishers to besmirch a president's character, and doubly offensive to wait until after his death before shooting their poisoned arrows. President Harding may not have been a model of propriety such as we expect of a president, but we never have believed the rotten accusations concerning his private life that were hurled against him after his death. He was a president of the United States, and he deserved more respect than was accorded him.

As an indication of how ministers help medical frauds the testimony in the trial of the cancer quack, Dr. Charles C. Root, of Indianapolis, is interesting. Dr. Root's former stenographer testified that she had sent from two thousand to three thousand letters to ministers offering free fountain pens for the names of cancer sufferers sent to the hospital. She said that frequently from forty to sixty replies were received per day from ministers who availed themselves of the offer.

We always have contended that ministers were too poorly paid, and that if they received more for their services they would not be quite so willing to take up with all sorts of fraudulent schemes that promise some sort of commission or profitable return to them. However, a thing we never could understand is, why a minister, supposedly intelligent and having a conscience that is in good working order, can endorse or take up with any form of medical quackery.

WE suggest that every member of the Indiana State Medical Association should read the proceedings of the last meeting of the Madison County Medical Society, published in this number of *THE JOURNAL*. Every county medical society in the state well could devote one evening to the discussion of the abuses of medical charity, and follow the example set by the Madison County Medical Society in having the judges, county commissioners, and township trustees present to get inside information on this free medical service propaganda proposition and what it means to the taxpayers of the state. Furthermore, it is a good plan to have detailed information as to the cases referred for medical charity, an analysis of the conditions for which referred and the ability of the patients to pay for such services. Incidentally, the physicians who are responsible for referring these unworthy cases for free medical services in our state institutions ought to be shown up.

POOR Lindbergh has been so fed up on the adulation of hero worshipers and the objectionable attention of the curious that he finally has lost his calm and unperturbed demeanor, as evidenced by his recent exhibition of peeve that brought forth some very unkind criticism from the press. Newspaper reporters long since would have "balled him out" had not their superiors held them in check. However, within the last few weeks a few newspaper editors of lay papers have come out editorially with very sharp criticism of Lindbergh's behavior toward his friends and well-wishers. His recent apparently deliberate splashing of newspaper reporters and spectators with mud from his machine has aroused the ire of some of his would-be newspaper friends and they have retorted by calling him names. Somehow or other we sympathize with Lindbergh, for we know how obnoxious and discourteous some of the attention has been, and yet he ought to realize that continued civility is an asset.

A TRAVELING psychologist by the name of David V. Bush advertised extensively in the lay press that he would deliver free lectures on "The New Philosophy in Science," in one of the theaters in Rochester, New York. The very efficient secretary of the Better Business Bureau of Rochester got busy in securing the proper information from the A. M. A. office in Chicago, which in effect was that Bush is a traveling quack psychologist. He brought his guns to bear upon newspapers and theater, with the result that the said Bush decided that Rochester was too hot a place for him and he canceled his engagement. It is quite possible that Bush is heading west and will strike Indiana. If he does, the organized medical profession in the community where he advertises should get busy and put a crimp in his plans. Furthermore, the better business bureaus of any of the cities of Indiana should follow in the lead of the Better Business Bureau of Rochester and keep this man Bush from imposing on the public.

"Concerning policies to be followed by THE JOURNAL of the Indiana State Medical Association in regard to maintaining a strict standard of ethics by physicians, the Bureau of Publicity desires to express its unreserved approval of the general policy pursued in the past by THE JOURNAL in relation to advertising.

"There is no neutral zone. All advertisements should state facts only and representations made by advertisers should be subject to strict scrutiny by the editor of THE JOURNAL. No favorable publicity through the columns of THE JOURNAL or through its advertisements should be given to physicians, pharmacists or any other person in any matter which is not strictly ethical.

"The Bureau also is glad to approve the criticism appearing in THE JOURNAL from time to time of physicians who seek notoriety or personal puffery through the local lay press.

"A medical journal should be the channel for the dissemination of scientific facts carefully thought out and clearly and ethically expressed."

Thanks for those kind words. The editor of

THE JOURNAL has tried to maintain and support the traditions, ethics and proprieties of medical practice. Sometimes the work seems discouraging, but we'll "carry on."

WE desire to repeat what we have said before, that it is amusing to hear the average general physician talk glibly about x-ray findings after he has given an affected wise look at some x-ray plates which he attempts to interpret himself. X-ray work is a specialty in itself and requires a lot of experience and training in the specialty by one who otherwise is an excellent physician in order to interpret the plates trustworthily in a very large number of conditions, and even the so-called x-ray expert falls down often enough. As a concrete example of what we are driving at in this discussion, we recently saw a case in which the family physician, backed up by a so-called x-ray technician, declared that the nasal accessory sinuses were perfectly clear of marked pathology, and some rather poor roentgenograms were offered in evidence. The clinical symptoms pointed to an involvement of an antrum, and upon having an x-ray picture made by a competent roentgenologist the clinical diagnosis was substantiated, and later operation showed the sinus not only to be entirely filled with fluid but to contain polyps as well.

THROUGH our newspaper clipping service we learn that several editors of lay papers are complaining about the services of Dr. King as secretary of the State Board of Health, because the expenses of the State Health Department have increased during the last ten years. What a silly argument! In the first place, our State Board of Health is doing more in every way than it did ten years ago, and that alone would mean increased expense. On the other hand, everything costs more now than it did ten years ago. It is all right to preach economy as well as practice it, but when it comes to public health that is a poor place for economy when we are getting efficient service and no extravagances. We can name a dozen places where the state could practice real economy with profit to the taxpayers but with considerable loss to the grafting politicians. No, don't fire Dr. King because the State Board of Health is spending more now than it did ten years ago. We might just as well talk about spending as little on pavements during the next four years as we spent during any four-year period ten or fifteen years ago, and it would be just as sensible.

SODIUM AMYTAL (sodium iso-amylethyl barbiturate) has made its debut in Indianapolis as an intravenous anesthetic. A preliminary report appeared in February, this year, in the THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

Indianapolis is fortunate in being able to con-

tribute what promises to be an event in medical history.

To date about four hundred cases have been operated with sodium amytal alone or in combination. As will be seen in the articles in this number of the *Indianapolis Medical Journal* almost any degree of anæsthesia can be obtained. There is none of the post-operative nausea, vomiting and shock that is seen with ether. The drug, to be sure, is in its infancy, and should be used cautiously, in selected cases, until more information is obtained. Fortunately, ephedrin in combination with caffeine seems to be an efficient antidote for the only ill effects so far observed, namely drop in blood pressure.

However, from work done, sodium amytal is going to be a valuable addition to our armamentarium.—*Indpls. Med. Jour.*, Apr. 1929.

ACCORDING to *Medical Economics*, which made a survey of the incomes of physicians, three thousand in number representing all sections of the United States, the average net income is apparently \$5,806. In rural communities it is \$3,284; in metropolitan centers, \$7,125; and in industrial centers, \$6,235. In commenting on these figures *Medical Economics* says that the income does not represent a fair return to a man who has more than \$20,000 invested. An interesting feature of the report is that the living expenses vary from \$3,027 in the rural districts to \$4,922 in the metropolitan districts. While the income in the larger cities is greater than in the town and rural districts, yet the cost of living is greatly increased in the larger cities and thus offsets the greater income. Another interesting feature of the report is that out of the income most of the physicians save something, and here the striking feature presents itself that physicians living in towns of not over 25,000 population exhibit the larger savings. The questionnaires had no identifying feature and were not required to be signed in view of the very personal information furnished, and in consequence it is thought that the survey and results obtained are dependable.

THE Fort Wayne Medical Society on March 15th adopted a minimum fee schedule. The items are as follows:

Office calls.....	\$ 2.00
House calls	3.00
House calls (after 6 p. m.).....	5.00
House calls (after 10 p. m. to 8 a. m.)	7.00
Sundays and holidays:	
After 12 noon.....	5.00
After 10 p. m.....	7.00
Prescription-phone call	1.00
Country calls:	
Price of call plus 50c per mile.	
Obstetrical service	50.00
Obstetrical surgical service.....	75.00

Herniotomy	115.00
Tonsils and adenoids:	
Children	50.00
Adults	75.00

It is expected that every member of the Fort Wayne Medical Society will follow the schedule religiously. Some say they are following the schedule now, others say that they will *try* to follow it. Anyway, the schedule, if enforced, means better remuneration for professional services rendered, but why wasn't the schedule made more complete?

WE continue to be bombarded with letters and circulars from one Howard W. Ambruster, of New York, who seems to be unduly excited concerning the action of the federal officials in not enforcing certain standards pertaining to the importation of ergot. Recently these Ambruster communications are quite vitriolic in condemnation of the A. M. A. and medical journals in general that do not make a noise in support of Ambruster's conclusions. An amusing feature of the last communication is an attack upon a former officer of the A. M. A. who now and for years previously has had absolutely no voice in medical affairs of any kind. If there is any truth to the contention that impure ergot is being admitted to this country and the same is improperly and unlawfully labeled and sold, certainly some of our high-class pharmaceutical manufacturers would publish the fact and even enter a protest concerning the matter. It does not seem reasonable to suppose that one man interested in the import business should be the only one to discover such gross abuses as charged to the Federal officers and pharmaceutical manufacturers. The reason for Ambruster's tirade is made plain through a statement in *Time*, for April 15, 1929, to the effect that Ambruster, as an importer, holds a corner on all of the most approved ergot which comes from Spain and Portugal.

A LAY citizen writes the secretary of the Northwest Branch Chicago Medical Society as follows:

"Chicago, March 11th.

"Dear Doctor:

"You are to be congratulated upon your stand against free clinics.

"I know many people well able to afford professional care, yet they are attending clinics.

"The Infant Welfare and Public Health Nurses are no aid to the medical profession. They accept the role of a physician or else refer the case to some doctor at a clinic.

"The philanthropists enjoy the admiration the public gives whenever some one of them endows a free medical institution. The rich man enters as a competitor in the medical field, for there he knows he finds 'ethics' making the group helpless.

"The people would desire medicine and health free, but all other commodities should sell at a profit.

"As the demand for doctors decreases, the economic rule will prove itself with a lessened supply and in con-

sequence no safeguard against epidemics, less individualized attention and a lower grade of doctors.

"An Anti-Clinic Citizen."

No doubt there are many lay persons who quite agree with medical men that free medical services to those who do not deserve such consideration is inimicable to the best interests of society at large. Every community should furnish free medical service, clothing, food and shelter to the indigent of that community. There is no reason why medical service should be excluded from the necessities, and the medical profession be asked to bear that burden. Furnishing free medical services to those able to pay is a rank injustice to all concerned and is worthy of nothing but the severest condemnation.

THE budget committee of our Association has been "trimming the corners" considerably. A limit has been placed upon the amount to be expended for guests at the annual session, and there have been cuts in various directions. One decisive action that seems to us to be of questionable value is the cutting off or omission of official stenographers to take the proceedings, and the request that the local committee on arrangements furnish such stenographers as seem necessary.

As a matter of fact, medical stenography is a specialty in itself, and it takes long training and experience to make a medical stenographer that can do trustworthy work. We feel that the budget committee has made a mistake in depending upon ordinary stenographers, no matter how generally proficient they may be, if we are to preserve for publication an accurate report of the proceedings of our scientific meetings, for even a casual acquaintance with medical terms is not sufficient in taking the proceedings of a program that is so diversified in character. We have known so-called expert stenographers to fail in attempts to take medical dictation and to turn in for publication copy that was hopeless in expressing the views of the speakers. Even the request that speakers revamp and edit the stenographic report of their remarks does not work out satisfactorily for the reason that some physicians never assume the task of doing the work expected of them, and others take advantage of the opportunity to inject into the published discussion ideas and thoughts that never were expressed in scientific meetings. Therefore, we hope that the budget committee will revise its conclusions to some extent, for our pessimistic prognostications are based on repeated experiences. Furthermore, there is no great need of such questionable economy.

FORT WAYNE has had a mild epidemic of typhoid fever due to contamination of the water supply through a by-pass owned by one of the industrial concerns which supplemented the regular city water by river water into which sewerage is dumped. The question arises, why should any manufacturing concern, company, or individual be

permitted to have any city water connection that has any communication whatsoever with a supply furnished from a contaminated river. Morbidity and mortality often is due to carelessness in preventing contamination of water or food supplies. Many communities are not sufficiently particular concerning the milk supply, and of course that means danger, for many communicable diseases come from milk. Therefore it is just as necessary to insist upon pasteurized or certified milk as it is to safeguard the public water supply. Pasteurization merely means heating the milk to a temperature of 143 degrees Fahrenheit for thirty minutes. An error may occur through underheating, but no particular harm is done through overheating. When every phase of milk production can be controlled absolutely, then certified raw milk is preferable, but the difficulty is to obtain proper control of the supply and supervision of all of the processes required in handling the milk and being assured of the healthy condition of the cows. There is no question about the superior value of certified milk, but for most communities, and particularly sections or communities where economy is an item, pasteurization is more economical and is practically the only safeguard against accident. However, certain definite and well-defined systems of cleanliness should be insisted upon, even before being pasteurized. This matter of safeguarding the water and food supplies of a community depends upon the dairy inspectors, sanitary inspectors and health officers. It is a great responsibility.

THE Chicago Medical Society expelled Dr. Louis Schmidt, a prominent and well-known genito-urinary specialist, for unprofessional conduct in connection with his association with the Rosenwald enterprises to lower prices for medical and surgical services. It seems that there were a number of features in connection with the controversy that made a bad case for Dr. Schmidt. On the heels of Dr. Schmidt's expulsion came the voluntary resignation of Dr. Bundensen, the county coroner, from membership in the Chicago Medical Society. On top of it all, Julius Rosenwald, the multimillionaire philanthropist who started the ball rolling through his benefactions (incidentally proving very profitable financially), has returned to his home in Chicago from a western trip and has announced that he will do all in his power to further reductions in the prices physicians charge the so-called middle-class people. The Chicago Medical Society members claim that the so-called middle class is taken care of by the medical profession at fees consistent with the ability of the patients to pay, and that there is no occasion for such an enterprise as that sponsored by Rosenwald, which would be abused by a very large class of people who are amply able to pay regular fees to physicians and who should do so in the interest of the upkeep of high quality service on the part of the medical profession. The

fight is made more interesting through the support of such large and influential newspapers as the *Chicago Tribune*, and it looks as though the medical profession is on the defensive, with the possibility that in the long run it will be "licked" and a brand of socialistic medicine will have the upper hand in Chicago. That will not hurt a few of the prominent physicians of that city, but the rank and file may as well prepare to accept salaried positions and be satisfied with fees little better than those paid the better class clerks in department stores.

A FEW very wealthy men who are endowing institutions to furnish free medical care, even to many able to pay, are severely criticized in various quarters, and there is a growing sentiment in opposition to that sort of pauperization of persons who should be helped to economic independence and preservation of self-respect. Dr. Emmett Keating, secretary of the Physicians' Fellowship Club (Chicago), gives a pertinent comment on this subject when he says, "Gifts of money for the purpose of reducing the cost of the care of the sick are delusions. If the men who have so much to give away would have prevented the accumulation of these enormous surplus funds by paying wages in keeping with present commercial demand, the middle class people would have money enough to pay their own bills incurred as the result of illness."

As a matter of fact our whole industrial scheme must be revised in the very near future, for while it is true that for the majority of people prosperity is evident, yet at the same time a limited number are amassing colossal fortunes as a direct result of the unequal sharing of the profits in industry. As we have said before in *THE JOURNAL* there ought to be some means of preventing the accumulation of a fortune estimated at more than *one billion* dollars within a period of twenty-five years, a thing that actually has happened in the United States. Fortunes of from fifty to three hundred million acquired from industries seem to be very common. We have no objection to reasonable reward for industry and genius, but we do object to such an uneven distribution of wealth as exists in America today. When we hear of these millionaire philanthropists and benevolently inclined individuals donating vast sums to furnish free medical services to all who come, we feel disposed to think that they are rather ashamed of the fact that they have accumulated so much money and are anxious to find some avenue whereby they can return it to the public. If they discriminated as to whom the services be donated, less criticism would be offered.

CHICAGO medical men are wrestling with the free dispensary proposition and its evils. The ultimate result of any free dispensary is to pauperize a self-reliant and self-respecting commu-

nity, and to impoverish the medical profession. In a letter sent to the medical men of Chicago the statement made is as follows: "The socialization of medicine is coming fast. There is no one to stop it except the members of the medical profession. Unfortunately, many of our physicians, influential and in strategic positions, are fostering the socialization of medicine. The reasons for doing so are not hard to see. There is a membership in the Chicago Medical Society of more than four thousand physicians. Those wanting socialization of medicine are in the minority, but they are backed by influences that make them a dangerous minority. If they have their way the time is fast approaching when a few physicians will have desirable, outstanding and lucrative positions, but the great majority will be panel doctors, handing out tablets for symptoms, keeping government records, sacrificing their own self-respect and losing the respect of the community. Only a vigorous and concerted protest from each and everyone can stop this degradation of the American medical profession."

Oh, boy! How we smile when we remember that a few years ago when *THE JOURNAL* talked about the fast approach of socialistic medicine of some form, and "the handwriting on the wall," which we thought we could see but most medical men could not see, some of our Chicago friends tried to tell us that we were crazy and that the medical profession of the United States never would have to contend with any form of socialized medicine. How times change, and to use a slang phrase we have used before, "Willie's trousers are now used for grandma's golf knickers." What we fear is that the medical profession is waking up too late, if waking up at all. Medical men never have stood together very firmly and unitedly, but they must get together soon and every mother's son of them get to work or they are going to be annihilated as independent practitioners of medicine. This is no idle talk but eventually will prove to be a true prophecy.

THE postmaster at Indianapolis, noting our comment in *THE JOURNAL* concerning our experience with air mail, writes us to the effect that the perfect performance of the air mail is much greater than that of the railroads, and he believes it to be about ninety-three percent. We congratulate the post office department upon this result, though, as stated in *THE JOURNAL*, we have not noted such perfect performance in our experience, and therefore have not felt like placing dependence upon air mail for rapidity of service. We believe, as stated in the editorial note to which good-natured objection is raised, that those on the direct air mail routes probably find the air mail service generally superior to train service, though we still doubt the efficiency of the service for those off of the regular air routes, unless perhaps for mail matter destined for distant points such as

California. Even the latter occasionally fails, as the instance cited goes to show. We hope that the post office department will continue to develop air mail service until it does render practically perfect service.

Incidentally, we may add that the rottenest service which THE JOURNAL office has to contend with is that between Fort Wayne and Indianapolis. With a cutting down of train service, and the greatly increased efficiency of interurban service between the large towns and cities it strikes us as peculiarly strange that the post office department does not make greater use of through interurban service for transporting local mails and thus increase efficiency of delivery. For instance, there are nine limited interurban trains each way between Indianapolis and Fort Wayne in a single day, each train making the trip in less than four hours. We also are informed that there is a fairly regular airplane passenger service between Fort Wayne and Indianapolis every day. To expedite mail service, why doesn't the post office department make use of some of this interurban and air service between the smaller cities instead of sticking to train service that is infrequent and often interrupted by bad connections at junction points. We are strong in our praise for what the federal postal department is doing for the people, in the way of rendering efficient service, but the officials should not get it into their heads that there is not room for improvement, and particularly as it pertains to the transportation of mail between the smaller cities of the country.

FOR a long time we have suspected that there would be a gradual decline in Christian Science faith and number of adherents, and finally a virtual death of the sect. In a special to the *New York Times* under date of April 4th, it is announced that a bill in equity has been filed in the supreme court by the directors of the Christian Science Parent Church, headed by Mrs. Anna C. Bill, in an action against the directors of the First Church of Christ Scientist, the Mother Church, charging that Mrs. Mary Baker Eddy, the founder of the faith, plagiarized various authors in her "Science and Health" and other writings, and used morphine in the last ten years of her life. The Parent Church, organized in 1924, declares in the bill that having discovered last January evidence of plagiarism and drug using, it can no longer recognize the moral authority of Mrs. Eddy as a religious teacher. Declaring that the Mother Church directors view any connection between Christian Science and the medical profession as inconsistent with Mrs. Eddy's teachings, the bill asserts that this belief and practice is a menace to public health, that it is inconsistent with sound public policy, and that it tends to undermine all measures adopted in the United States to prevent disease and rationally to treat it. The bill goes on to say that the split from

the church is due to the interpretation of Christian Science teaching, and the avowed assertion on the part of the dissenters that they would employ physicians and dentists and use drugs and medicine supplemented by mental healing. The controversy waxed warmer when it was discovered that Mrs. Eddy employed physicians and dentists and used drugs and medicine, including morphine, for relief of pain. Finally, it is charged that not only was Mrs. Eddy guilty of plagiarism but that Mrs. Eddy's use of morphine was not a legitimate one but that she was an addict, and for her last ten years, at her Chestnut Hill home, frequently received hypodermic injections of it from physicians and inmates of the house.

It will not be surprising to us if this squabble in the ranks of the Christian Scientists will be the undoing of the entire sect, and that Christian Science as a pure healing science not only will lose any popularity that it previously has had but that it soon will pass into the discard along with many other illogical beliefs and practices that have been employed for the relief of the sick.

OBSERVATIONS ON A MOTOR TRIP SOUTH (With apologies to McIntyre).—The new cement roads in Indiana are wider and better than the old ones.

The toll bridge in Kentucky that charged us one dollar toll when the regular rate is fifty cents. Probably they expected never to see us again.

A splendid evening with our old friends, W. D. Haggard and M. M. Cullom, of Nashville. "Billy" Haggard is a prince of a fellow and a noted surgeon so it is no wonder he was president of the A. M. A. a few years ago. We hope that "Billy" has accepted an invitation to be a guest at the Evansville session.

The devastating effect of floods all through the South—miles and miles of sand bags to protect the roads—pavements dynamited to save the bridges—muddy detours. The South is spending millions of dollars upon good paved roads but is entitled to Federal help in meeting the high water problem.

Traffic lights in little towns and hamlets—just as in Indiana—to make tourists think they have struck a really grown-up place.

Advertisements of hotels offering rooms with bath at two dollars—but seldom if ever is the advertised promise kept. In one small city an illy ventilated, badly furnished room with a dirty and antiquated bathroom cost \$8 and the meals were extra. The town was full of tourists every night so the hotel proprietor took advantage of the opportunity to overcharge those he thought he never would see again. In places throughout the South the tourists are considered "good picking" and charges are made accordingly, though there are many refreshing exceptions.

Many shops in the small towns and frequently seen in the country, where antiques are advertised for sale—and the amusing accidental discov-

ery of packing cases marked from a "manufacturer of antiques" in Connecticut, that were found in the back yard of one of the antique shops.

Selfish automobile drivers who cling to the middle of a paved road and keep others from passing—such are usually truck drivers but a sprinkling of tourists.

Hundreds of automobiles carrying camping outfits—no wonder the tourist camps are numerous and patronized. Incidentally many tourist camps in the South are made up of small cottages that are furnished with electric lights and running water—they seem to be very popular.

The cruelty of carrying dogs unprotected on the running boards of cars—a sudden swerve of the car and perhaps the dog is injured or killed. The humane societies should secure laws preventing such cruelty.

Southern hospitality when you get off the beaten paths—and no attempt to rob you—quite contrary to experiences in the resorts.

The fine old judge of Southern ancestry who punished all local sportsmen for fishing and hunting out of season, but who offered us guns and fishing tackle and told us he wanted us to have a good time—"We want you Northern people to know that we welcome you with open arms."

The great "kick" we got out of frequent visits to a Southern "cracker's" farm for fishing, and his philosophical observations on all topics. One day when complaining that the fish were not biting and the boat seat was hard, he remarked, "Doctor, a strike will rest at both ends." At another time he remarked, "Bass are like women, some days they pester you more than others."

Superstitions of the "niggers," and even the black people there call themselves "niggers."

The moving picture of the negro who collected worms for fishing by driving a stake in the ground and rubbing upon it. As a result of the vibration the worms come to the surface. We know for we witnessed an exhibition of that kind.

The negro caddy on the golf links who was told that if he lost another ball he would be fired for dinner. He was missing shortly afterward, and did not return, though previously he was a regular caddy on the links. His white competitors said that he was afraid to come back.

Surprise at not finding strawberries on the tables in the hotels in the strawberry district. All strawberries are shipped North was the excuse given.

The fine crops in Florida and the bolstering up of the former opinion that Florida is a great state and has a great future for fruit and vegetable raising as well as a fine playground for the winter.

The Florida hotels carrying denicotinized cigars and cigarettes with the sign, "Smoke to your heart's content and with content to your heart." In many respects that announcement is deceiving.

The wild extravagance of the newly rich at the

Florida resorts. The former clerk in the Wall Street district of New York who became a multi-millionaire within three years as the result of lucky speculation, and who distributed five to one hundred dollar tips in Florida for trivial service. Evidently he thought it was a good thing to keep money in circulation, but he received no better attention than the ordinary people who gave ten and twenty-five cent tips.

Girls with exceedingly short dresses and bare legs which with a swish of the skirt were exhibited nearly to the hips, all tanned a chocolate brown. Girls with bare legs, some naturally tanned and others synthetically tanned, at dances.

Several newspaper reports of drunken revelry among high school boys and girls. They have nothing on the boys and girls of the North where similar things occur, but whoever heard of such episodes before we had what some call prohibition?

Prohibition does not seem to have had much effect upon Florida. Off the beaten paths in Florida moonshine is aged in barrels and buried for three years, is considered "fine stuff" and there is plenty of it.

The terrific speed with which all cars travel on Florida highways. No "speed cops" except in the Carolinas, and there they trail motorists for miles to see that a thirty-five mile limit is observed. The only motor accidents we saw in three thousand miles of travel were in the Carolinas where "speed cops" rule the highways, and there we saw several wrecks. Fast drivers usually are good drivers, and an officer of an automobile club at Macon, Georgia, said that a survey of accidents in his district showed that most accidents occurred among inexperienced drivers and those who were careless though slow drivers.

The splendid service rendered by Chambers of Commerce and automobile clubs all through the South. The excellently marked roads on the through routes.

The fine golf courses at Pinehurst, as well as facilities for all sports, and the freedom from rank commercialism because the entire project is controlled by one corporation whose life depends upon the square deal. The marvelous golf played by the women experts in the North and South tournament at Pinehurst. The 310-yard drive on the level by Glenna Collett, the national woman's champion, and her marvelous iron shots.

The work of the Fox movietone outfit at Pinehurst in making sound pictures of all sporting events. The microphone placed five feet back of golfers to get the click of the balls in driving off.

The scantiness of clothing of the young women engaged in sports and the prevalence of tanned legs, backs and breasts, some of it synthetic, though much of it real and gotten in Florida.

Experience of going over four mountain ranges in one day, the last the Cumberland Mountains, at night. The steep grades and hairpin turns in

the Smoky Mountains, and the road not paved though well graveled.

The lack of courtesy on the road shown by colored and white chauffeurs driving for their rich employers. One husky Northerner "beat up" a smart-aleck white chauffeur from New York for his insolent remarks and inconsiderate conduct, and we almost cried for joy, as the same chauffeur had almost tempted us to commit murder.

The marvelous driving ability of the wife, who piloted the car every foot of the going and returning trip, brought us home without a mishap of any kind or even a scratch on the car, and who "stepped on the gas" much of the way.

Appreciation of the dependability of the present-day good car under any and all conditions, whether climbing mountains, fording streams, or traveling at high speed on good pavements with the route clear of traffic.

The recuperative effects of a southern trip in the winter for one who is ill, but who really enjoys getting home again and "in the harness."

DEATHS

JOHN B. WILLIAMS, M.D., of Anderson, died April 2nd, aged seventy years. Dr. Williams graduated from the Physio-Medical College of Indiana, Indianapolis, in 1885.

JOHN C. QUICK, M.D., of Muncie, died March 15th, aged sixty-six years. Dr. Quick had served two terms as mayor of Muncie. He graduated from the Physio-Medical College of Indiana, Indianapolis, in 1886.

J. A. RYAN, M.D., of Valparaiso, died March 15th, aged seventy-six years. He graduated from the Bennett Medical College, Chicago, in 1878, and was a member of the Porter County Medical Society, the Indiana State Medical Association and the American Medical Association.

NEWS NOTES AND PERSONALS

DR. P. G. MOORE, of Wabash, recently celebrated his eighty-fourth birthday.

DR. A. J. HOSTETLER, of Lagrange, has been reappointed as a member of the State Board of Health.

DR. E. E. KIRK, formerly of spicetown and Hagerstown, has moved to Newcastle, where he will practice medicine.

THE fifty-sixth annual meeting of the Northern Tri-State Medical Association was held in Toledo, April 9th, in the Academy of Medicine Building.

DR. C. F. HOPE, formerly of Shoals, Indiana, is now living in Ellettsville, where he has taken over

the office and residence of the late Dr. Oliver K. Harris.

DR. SHELBY W. WISHART, Evansville, delivered an address before the meeting of the American Society on the Prevention and Study of Goiter in Dayton, Ohio.

WILLIAM R. DAVIDSON, M.D., of Evansville, has been reappointed a member of the Indiana State Board of Medical Registration and Examination for the next four years.

AT the March 28th meeting of the Northeastern Indiana Academy of Medicine, held at Kendallville, Dr. Edwin N. Kime, of Indianapolis, presented a paper on "The Destruction of Pathologic Tissue."

AT the March 19th meeting of the Indianapolis Medical Society, a resolution was adopted asking the support of public-spirited citizens and civic organizations in a campaign to do away with the smoke evil.

TWENTY-EIGHT persons attended the dinner meeting of the Madison County Medical Society and the Ladies' Auxiliary of that Society, March 19th. Dr. J. P. McCown, of Indianapolis, presented a paper.

DR. WILLIAM F. KING, secretary of the State Board of Health, was elected a member of the executive council of the United States and Provincial Association of Public Health Officers, at a conference held in Chicago recently.

THE Dr. Sofie A. Nordhoff-Jung-Cancer Prize for the best work in the last years with regard to cancer investigations has been awarded by the Commission to Prof. Dr. Katsusaburo Yamagiwa, pathologist of the University of Tokyo.

THE Professional Business Bureau, established by the physicians of Evansville, Indiana, for the collection of delinquent accounts, already is self-supporting. In the three months of the operation of the bureau, over \$100,000 has been turned over by the physicians for collection.

DR. L. D. HUFFMAN, who has been associated with the Mayo Clinic, is now associated with the Los Angeles Medical Group and Clinic, which is an organization formed by three alumni of Indiana, Dr. John C. Irwin, Walter S. Haworth and Chalmer H. Weaver. Dr. Huffman also is an Indiana alumnus.

DR. LEON L. SOLOMON, of Louisville, Kentucky, announces the discontinuance of the Solomon Clinic, March 31, 1929. The Solomon Clinic

Building has been converted into a home for nurses and business women. Dr. Solomon will continue his private practice, limiting it to diagnosis and consultation work.

WITH the election of Dr. W. C. Dyer as president, Dr. O. C. Stephens vice-president, and Dr. Keith T. Meyer, secretary-treasurer, the organization of the Professional Business Men, Inc., was completed recently in Evansville. The purpose of the organization is to provide an adequate means of collecting accounts.

DR. M. L. HARRIS, of Chicago, president-elect of the American Medical Association, addressed the Fort Wayne Medical Society, March 19th, his subject being the "Economic Value of Medical Service." At the April 23rd meeting of the Society Dr. A. B. Luckhart, professor of physiology at Chicago University, was the speaker.

THE seventh annual summer graduate course in ophthalmology and otolaryngology, held under the auspices of the Colorado Ophthalmological Society and the Colorado Otolaryngological Society, will be held at Denver, June 16th to 20th, 1929. Particulars concerning the course may be obtained from William M. Bane, 1005 Republic Building, Denver, Colorado.

THE Chicago Medical Society will hold clinics at the Cook County Hospital from June 17 to June 29, inclusive. Registration fee of ten dollars will be charged to cover cost of preparing for and conducting the clinics. Complete information may be obtained by addressing the Summer Clinics Committee, Chicago Medical Society, 185 North Wabash Avenue, Chicago, Illinois.

THE Remington Medal, an honor bestowed by the profession of pharmacy, has been awarded by the American Pharmaceutical Association to Dr. Wilbur L. Scoville, chief of the analytical department of Parke, Davis & Company, for his "distinguished service to pharmacy" in acknowledgment of his outstanding accomplishments as chairman of the National Formulary Committee.

AT the dinner meeting of the Indianapolis Medical Society, held April 23rd, Dr. A. U. Desjardins, of the Mayo Clinic, presented a paper on "Roentgen Ray Treatment in Certain Benign and Inflammatory Conditions." At the meeting April 30th, Dr. Udo J. Wile, of the University of Michigan, presented a paper on "Some Unusual Phases of Visceral Syphilis of Interest to the Practitioner."

AT the April 2nd meeting of the Muncie Academy of Medicine, Dr. John S. Coulter, of Chicago, presented an illustrated lecture on "The After-Treatment of Injuries." On April 9th, Dr. E.

Starr Judd, of the Mayo Clinic, presented a paper on "The Surgical Treatment of Diseases of the Biliary Tract." April 30th, Dr. John Phillips, of the Cleveland Clinic, presented "The Clinical Significance of Jaundice."

THE fourth series of clinics, sponsored by the Indiana University School of Medicine and Hospitals and the James Whitcomb Riley Memorial Association, was given by Dr. Arthur Steindler, Professor of Orthopedic Surgery, State University of Iowa, Iowa City, on Thursday, May 2. Dr. Steindler held a diagnostic clinic in the afternoon and gave an address on "Paralyzed Upper Extremity."

THE regular spring meeting of the Eleventh Indiana Councilor District Medical Association will be held in Huntington May 16th, beginning in the forenoon with a clinic by Dr. Frank Smithies, of Chicago. The speakers on the afternoon program will be Dr. Ziegler, of the Mayo Clinic, and Dr. Smithies. Headquarters will be at the Hotel Lafontaine, where a banquet will be held in the evening, with Attorney Bowers, of Huntington, as the speaker.

A BRONZE tablet, the gift of the medical staff, has been presented to St. Vincent's Hospital, Indianapolis. The tablet is dedicated to the "memory of the physicians and surgeons of St. Vincent's hospital who gave of themselves to lessen suffering, to restore health and to save life." The names of Dr. Joseph Wilkins Marsee, Dr. George L. Cook, Dr. Orange Garrett Pfaff, Dr. Frank A. Morrison, Dr. Charles Fred Neu and Dr. John H. Oliver were inscribed on the tablet.

HONORABLE GEORGE W. WICKERSHAM announces the establishment of the Thomas William Salmon memorial to provide recognition of the scientist who has made the greatest contribution in the fight against mental disease during each year. Awards are to be national and international and will provide for the wider dissemination of the knowledge of mental hygiene and insanity through cooperation with the New York Academy of Medicine, in whose hands the administration of the \$100,000 fund is to be placed.

IN Vienna, Austria, the American Medical Association of Vienna, a well-developed organization, exists for the purpose of facilitating postgraduate medical work for English-speaking physicians. All of the English medical courses given under the auspices of the University of Vienna are administered through this organization. Further information concerning the Association may be obtained by addressing the American Medical Association of Vienna, Vienna VIII, Alserstrasse 9, Austria.

THE April Monthly Clinic Program presented by the staff of the Welborn Hospital Clinic was held Wednesday, April 18th, at 8:00 p. m. The following program was presented: Thromboangiitis Obliterans (Buerger's Disease), Dr. J. Y. Welborn; Baby Clinic, Dr. E. L. Boyd; X-ray Treatment and Symposium on Diagnosis of Thymic Enlargement, Dr. Keith T. Meyer; Gonorrhea in the Male, Dr. J. W. Visser; Gonorrhea in the Female, Dr. J. F. Wynn. A number of physicians from the tri-state area were in attendance.

THE Welborn Hospital Clinic is purchasing a moving picture machine for the purpose of showing medical films. Within the last year a number of medico-educational films have been made which are instructive not only to the layman but very interesting to the physician. Several of these films already have been shown. With the advent of the talking-moving picture film, the possibilities of these films as an educational factor can only be imagined. It will surpass the advantages of a personal attendance at a lecture in that one can study and listen to these films at his leisure.

THE Hoffman-LaRoche Chemical Works have secured a tract of land at Nutley, New Jersey, twelve miles from New York City, and are there erecting new laboratories. Ground was broken last November, and construction work has been pushed so that it is hoped the company will be able to move from their quarters at 19 Cliff Street, New York City, to their new location in May. This company manufactures a large number of Council accepted products, advertised in official state medical journals, and readers of this JOURNAL naturally will be interested in these developments.

Two substantial gifts to provide for the equipment and operation of the research and out-patient departments of proposed additions to the Indianapolis City Hospital were recently announced by Dr. F. E. Jackson, president of the Board of Health, and Dr. W. A. Doeppers, superintendent of the hospital. According to the announcement, Eli Lilly & Company has agreed to contribute a sufficient amount of money to equip a complete laboratory for clinical investigation to be conducted under authorities at the hospital. The name of the donor of the gift to equip the out-patient department has been withheld.

THE Chamberlin-Vanderbilt Hotel at Old Point Comfort, Virginia, has been selected for the annual meeting of the American Pharmaceutical Manufacturers' Association to be held June 3-6.

The meeting this year will take on an international aspect as invitations have been extended to more than twenty-five leading Canadian manufacturers to attend and participate. Representatives of the British Chemical Manufacturers have also been invited. Discussion of distribution prob-

lems will be one of the principal features of the meeting.

Closely allied to distribution is the work of the publicity committee. Their report will include the results of a survey of the medical profession which has recently been started to improve the service of the association to the profession. There will be exhibits of medical advertising by some of the members and many practical advertising and publicity problems will be discussed.

MR. EUGENE C. FOSTER, director of the Indianapolis Foundation, and Dr. Charles P. Emerson, dean of Indiana University School of Medicine and Hospitals, announce the appointment of Dr. Helen P. Langner, who is extraordinarily well qualified, as director and chief psychiatrist of the Child Guidance Clinic of Indiana University. This clinic will be maintained by the Indianapolis Foundation from the bequest of Delavan Smith to the Foundation and will be continued for a period of two years by the Foundation as a demonstration clinic.

Dr. Langner has made an enviable reputation for herself in her various assignments under the National Committee for Mental Hygiene, and is admirably fitted to head this work in Indianapolis.

The Child Guidance Clinic of Indiana University of which Dr. Langner will be the head will have the care of the children from the city of Indianapolis needing such attention who are patients of the hospitals of Indiana University, and those referred directly to this clinic from the various social agencies, courts, and schools of Indianapolis. Dr. Langner becomes a member of the faculty of Indiana University, department of psychiatry. The headquarters of the clinic will be on the first floor of the Medical School Building. She will be assisted by the hospital staffs and by two psychiatric social workers. This clinic will occupy a very different field from, and yet one complementary to, that of the children's clinic which is being conducted at the Riley Hospital by Professor H. H. Young of the College of Arts and Sciences of Indiana University, who will continue as before to make special study of those children who present special problems in clinical psychology. Dr. Langner's clinic, which continues the work started several years ago by Dr. Frank F. Hutchins, assumes the professional responsibility for planning the care of children presenting psychiatric problems. Professor Young will have supervision of the psychological aspects of this work.

The following objectives have been outlined:

1. To render such service to the community as would best demonstrate the application of the principles of mental hygiene, particularly through (a) examinations of children referred by the schools, by courts, by other agencies or individuals interested in children, notably private physicians; (b) by conducting case conferences to which all quali-

fied individuals would be invited; (c) by special talks to selected groups of parents, teachers, social workers or others interested.

2. To assume for the individual examined the responsibility of giving him the most complete examination possible, physical, mental and social. This with a view toward helping him to attain his maximum degree of efficiency by planning for him such future care and training as will serve to prepare him best for his place in the community and at the same time to obtain for himself the highest degree of personal happiness insofar as this is consistent with socially acceptable behavior.

3. To place at the disposal of students, medical, psychological, and sociological, all available material of such a clinic for the purpose of assisting them in the development of a mental hygiene point of view and acquainting them with the significance of their own and each other's contributions to this field.

With such aims the clinic is to be equipped with personnel and apparatus to conduct thorough physical, psychological, social, and psychiatric examinations.

The plan is for the pediatric department to assume full responsibility for conducting physical examinations and for the treatment of all children coming to the clinic and that the medical department will assume the same for adults and that the psychology department will assume responsibility for making all examinations required in that field. The clinic would handle at least two types of case studies:

1. Intensive clinic study, also known as clinic complete study—in which the clinic assumes the responsibility for the entire study and treatment of the individual.

2. Cooperative complete study in which a co-operating agency is responsible for the social history and for all subsequent treatment for the case. The clinic would be responsible for the treatment plan and would undertake to do follow-up psychological and psychiatric work if indicated.

Other types of study can be developed as the clinic finds its stride.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Haley M-O Co.:

Magnesia-Mineral Oil (25)-Haley.

H. K. Mulford Co.:

Perfringens Antitoxin-Mulford.

National Drug Co.:

Diphtheria Toxin-Antitoxin Mixture.

Parke, Davis & Co.:

Tetanus-Perfringens Antitoxin, Refined and Concentrated.

G. D. Searle & Co.:

Solution Bismuth Sodium Tartrate-Searle, 1.5 percent.

Sulpharsphenamine-Searle:

Sulpharsphenamine-Searle, 0.4 Gm. Ampules.

Sulpharsphenamine-Searle, 0.5 Gm. Ampules.

Sulpharsphenamine-Searle, 0.6 Gm. Ampules.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

March 22, 1929

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held March 8 read and approved.

The release on "Undulant Fever" for publication Saturday, March 30, was read and approved.

The following radio release was approved for broadcast: March 23, "Undulant Fever."

Report made to the Bureau of the attempt of Henry Junius Schireson whom the American Medical Association asserts is a "self-styled plastic surgeon and advertiser, with a professional record that reeks to heaven," to speak before a group of business women in Indianapolis. Through the members of the Woman's Auxiliary of the Indianapolis Medical Society the information concerning Dr. Schireson was placed in the proper hands and it is understood that Dr. Schireson's invitation was withdrawn.

Upon the suggestion of the editor of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION the Bureau instructed the secretary to obtain a complete file of the books and pamphlets published by the Bureau of Investigation of the American Medical Association. The headquarters office has many of these pamphlets but steps should be taken to obtain a complete file of them.

The following letter was received from the Executive Secretary of the Indiana Tuberculosis Association:

"The cooperation we received from the Indiana State Medical Association last year during the Early Diagnosis Campaign was very much appreciated. As you have been advised previously, the help received from your association was largely responsible for the success of this activity.

"This year the Early Diagnosis Campaign will again be conducted. We have slides and films for the medical profession in addition to a leaflet containing the 'Scheme of Classification' for tuberculosis; and the abstracts of current technical articles which proved so popular last year with the doctors will again be distributed monthly. You will find enclosed samples of some of the material being used and a descriptive circular indicating other material.

"This campaign which is intended to bring about the early diagnosis of tuberculosis and a broader knowledge of the subject, is we feel the most constructive piece of work attempted. We hope that the State Medical Association will again lend the fine cooperation given last year. Whatever service can be offered will be very much appreciated."

Last year the Bureau of Publicity cooperated with the Tuberculosis Association, publishing three articles upon the advantages of the early diagnosis of tuberculosis and other diseases.

Report received from American Medical Association analyzing medical advertising appearing in an Indiana newspaper. The secretary was instructed to review this report and be prepared to present the high points to the Bureau at the meeting next week.

A copy of the City Manager Charter of Indianapolis was placed before the Bureau. The amendments to the

charter passed at the last legislature will come before the Bureau at the next meeting.

Arrangements were to be made to send a representative to the Third Annual Conference on Public Health which is to be held under the direction of the American Medical Association at Chicago March 29 and 30. The expenses of sending this representative were to be paid by the Bureau of Publicity.

The following bills were approved for payment:

A. B. Dick Company.....	\$ 2.50
Central Press Clipping Service.....	9.09
Curtis 1000 Inc.	28.21
	<hr/>
	\$39.80

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole March 29, 1929.

BUREAU OF PUBLICITY

March 29, 1929

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held March 22 read, corrected, and approved.

The release—"Spring Drive Against Tuberculosis"—read and approved for publication Saturday, April 6.

The following radio release was approved for broadcast: March 30, "Early Diagnosis Campaign Against Tuberculosis."

Request was received from the executive secretary of the Marion County Tuberculosis Association for the use of the State Association's time for broadcasting a series of four talks during April. The letter follows:

"The second Early Diagnosis Campaign is being put on by the National Tuberculosis Association and its affiliated Associations throughout the country in April. The Marion County Association is anxious to get the message of the importance of an Early Diagnosis to as many people as possible. In order to do this we went to the WFBM radio station and asked permission to give a series of talks during the month of April over the radio. They informed us that their program is filled and suggested that the Indiana Medical Society, which they said was allowed ten minutes each week over the radio, might possibly let us use their time. We are writing to ask you if this would be possible.

"We would be most grateful and the program we have in mind would be as follows: First week, a talk on 'Importance of Early Diagnosis of Tuberculosis'; second week, 'Importance of Early Diagnosis in Cancer'; third week, 'Importance of Early Diagnosis of Heart Diseases'; fourth week, 'Importance of Early Diagnosis of all Diseases,' stressing the need for an annual health examination. The one on tuberculosis would be given by the superintendent of Sunnyside Sanatorium, and the others by men equally as well known in their field as the one above mentioned.

"If your committee could see its way clear to granting us this favor we would be most grateful and would gladly comply with any rules governing this time allotted you over the radio."

The Committee gave its approval for the use of this time and instructed the secretary to write the Tuberculosis Association to that effect, stating the rules which the Bureau of Publicity has followed in its own broadcasts. In particular the secretary was instructed to notify the Tuberculosis Society that when broadcasts have been given upon disease the following rules are observed by the Bureau:

1. The name of the physician broadcasting should not be given.

2. The material broadcast is given under the name of the Bureau of Publicity of the Indiana State Medical Association and not under the name of any individual physician.

3. All material broadcast with the approval of the Bureau must be read and approved by the Bureau before it is broadcast.

The only exception to these rules has been made in the case of public officials such as the superintendent of the City Hospital. Under these rules which have governed the Committee in its use of the radio, it would be all right to use in person both the superintendent of Sunnyside Sanatorium and the secretary of the State Board of Health as these men are public officials and are not in private practice. The names of these men as authors of the papers could be broadcast over the radio *but no private physician's name can be used.* The Bureau would be pleased to have any private physician submit any article which is to be broadcast for the Marion County Tuberculosis Association during the time allotted to the Publicity Bureau of the Indiana State Medical Association.

The secretary reported that a letter had been written to the American Medical Association asking for the complete file of books and pamphlets published by the Bureau of Investigation of the American Medical Association.

The secretary reported that a representative of the Publicity Bureau of the Indiana State Medical Association had been sent to the Third Annual Conference on Public Health which was in session in Chicago March 29 and 30 under the direction of the American Medical Association.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 5, 1929.

BUREAU OF PUBLICITY

April 4, 1929

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., Chairman; C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held March 29 read and approved.

The release—"So-Called Cancer Cures"—read, and with certain corrections was approved for publication Saturday, April 13.

The title of the first of a series of four talks to be broadcast by the Marion County Tuberculosis Association during the time usually allotted for the broadcast of the Bureau of Publicity follows:

April 6: "The Importance of the Early Diagnosis of Tuberculosis" by Superintendent of Sunnyside Sanatorium, Oaklandon, Indiana.

Delegation from the Indianapolis Lions Club called upon the Bureau asking the approval of the Bureau for conducting a free baby clinic which the local club is considering. This matter was referred to the Bureau by the president of the Indianapolis Medical Society to whom it was presented. The chairman of the Bureau of Publicity presented to the Bureau the following correspondence in regard to this proposition:

Letter to President of Orleans Parish Medical Society, New Orleans, La.:

"Mr. J. J. Russell, representing the Lions Club, called on me yesterday to request that I as chairman of the Bureau of Publicity of the Indiana State Medical Association, obtain the approval of the Bureau for a free baby clinic which the local club is considering.

"As I understand Mr. Russell's plan, it is to select a few high class physicians and then to have the Lions Club seek cooperation of the mothers and various groups in factories and other places and get the mothers to bring their babies to the clinic for physical examination to determine the question of bodily defects, of illness or otherwise.

"As I understand it Mr. Russell is supposed to ask this group of physicians to make these examinations free of charge and the babies are to be examined whether their parents are able to pay or not.

"Mr. Russell says you have approved of such a plan in New Orleans and I am writing to inquire how it is working and whether it is officially approved by your local medical society including in the plan the free examination of those able to pay.

"Mr. Russell and a representative of the Lions Club have asked me, as chairman of the Bureau of Publicity of the Indiana State Medical Association, to approve such a plan as suggested above. I have asked them to come to the meeting of the Bureau of Publicity on next Friday afternoon at which time the matter will be discussed.

"We have had considerable trouble in Indiana because of the tendency of our State Board of Health to promote what our JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION and many of the members of the different county societies regard as 'state medicine.' This has been particularly objected to because the Child Welfare Department has solicited all classes of mothers to bring their babies to the Child Welfare Clinic and have them examined free of charge. We are of course heartily in favor of examining those unable to pay.

"Any information you can give me will be greatly appreciated."

The answer to this letter follows:

"Replying to your letter of March 30th addressed to Dr. J. Birney Guthrie, former President of the Orleans Parish Medical Society, I feel justified in saying to you that both he and I as well as other officers of the Society consider that the clinic conducted here by Mr. Russell and his wife was highly successful and was subject to no unfavorable criticism of any kind.

"So far, therefore, as the Better Babies Week held here is concerned it was successful and commendable.

"The situation in Indiana to which you refer is one in regard to which of course I cannot express an opinion, although I agree with you that the tendency of health boards is to go too far."

The spokesman for the Lions Club outlined the plan to the Bureau. Under the instructions of the Bureau the following letter was written to the spokesman for the Lions Club:

"The Bureau of Publicity of the Indiana State Medical Association has considered fully the matter of holding a baby clinic as proposed by J. J. Russell, representing the Lions Club, and the members do not feel at liberty to give the endorsement of the Bureau to an undertaking which provides free examinations for persons able to pay.

"The Bureau believes that Mr. Russell's plan is not one which would be permanently and scientifically helpful. The members of the Bureau feel that any examination worth-while would take at least one-half hour per person.

"While the Bureau appreciates the good purposes of the Lions Club it does not feel that it should approve this undertaking."

Copy of this letter was sent to the president of the Indianapolis Medical Society. Under instruction of the

Bureau letters were also sent to the editor of THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION and to the secretary and general manager of the American Medical Association in regard to the action of the Bureau.

The following letter was received from a member of the Indianapolis Medical Society:

"In reference to a conversation I had the other day with Dr. _____, I am suggesting that more effort be made to interest the members of the local societies throughout the state, in preparing papers on Medical subjects interesting to the laity. It has come to my attention that the demand for papers of this type far exceeds the supply.

"I feel that the Medical profession would be negligent in their duty to the community if this demand was not met.

"My suggestion would be that the members of the local organizations all over the state be requested to write papers of this type, and that there should be a local committee which should pass upon these papers as to their fitness, and to act as an agency to supply the demand that may come in from clubs and societies which wish addresses on various medical subjects."

A written report was presented to the Bureau from the representative of the Bureau who was present at the Third Annual Conference on Public Health held at Chicago March 29 and 30 under the direction of the American Medical Association. This report was to be taken up in detail at the next meeting of the Bureau.

Each of the members of the Bureau of Publicity was given a copy of the City Manager Act of Indiana containing the original act and the amendments adopted at the 1929 session of the legislature.

A copy of the charges brought against Dr. Chas. C. Root of the Indianapolis Cancer Hospital by the Better Business Bureau was brought to the attention of the Bureau. The secretary was instructed to summarize these charges briefly and present a copy of the summary at the next meeting of the Bureau in order that these charges might be published in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

The Bureau was asked to give its approval to a series of ten-minute talks over station WFBM in connection with the National Child Health Week that is being observed under the direction of a committee appointed by the City Board of Health. The Bureau approved the idea and the talks will be based upon material already released by the Bureau.

The following bills were approved for payment:

Central Press Clipping Service.....	\$ 5.00
Jas. H. Stygal, M.D.....	37.01

\$42.01

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 12, 1929.

INDIANA STATE MEDICAL ASSOCIATION REPORT ON 1929 SESSION OF LEGISLATURE

March 22, 1929.

Now that the battle is over and all bills are signed by Governor Leslie that are going to be signed, your state legislative committee wishes to thank the officers, councilors, secretaries, chairmen and members of each county medical society legislative committee for the fine help received during the session of the legislature which has just ended.

Bills of special interest to physicians signed by Governor:

State Budget.—Under the budget the State Board of Medical Registration and Examination will be allowed \$6,000 for investigating purposes for the next

two years. This should enable the Board to carry on its work much more effectively as often it has been hampered in the past by lack of finances.

H. B. 189 (Brewster)—Gives medical examiners in insanity inquests 10 cents a mile going to and from inquest as traveling expenses. (This is in addition to the per diem already received by medical examiners in such inquests.)

S. B. 159 (Hewitt)—Requiring county, city and township officials to dispense antirabic serum free to persons too poor to purchase it.

H. B. 304 (Kottkamp)—Requires students in nurses' training to obtain the required educational work before starting training courses. The present law provides for educational work after training.

H. B. 430 (Harris)—Fixing fine of not to exceed \$250 and maximum jail sentence of thirty days for possession of Cannabis Sativa and Indica, species of India narcotics, by persons other than wholesale druggists or jobbers or registered pharmacists, except upon prescription of licensed physician, veterinarian or dentist.

H. B. 92 (Worley)—Permits state board of optometry to investigate complaints of violation of laws concerning that profession and fixes a fine of not to exceed \$300 or four months in jail for violation.

Through the activity of legislative committees and county medical society officers none of the many bills opposed by the Indiana State Medical Association were passed. Among these bills opposed by the State Association which failed were:

The Chiropractic Separate Board Bill—Introduced by Rep. E. E. McGriff of Portland (Jay County) and A. R. Bernhardt, South Bend, (St. Joseph County).

Hospital Bill introduced by John Thiel of Hobart, (Lake County). This bill would have done away with so-called "closed" hospital staffs and would have fixed the control and practice of medicine within the jurisdiction of the State Board of Health. Mr. Thiel finally withdrew the bill.

Malpractice Bill which would do away with expert testimony in malpractice suits. After hearing opposition from the medical profession Senator Otto W. Koenig of Fort Wayne did not push the bill.

Bill Affecting State Board of Medical Registration and Examination—Introduced by Rep. Cantwell, Terre Haute (Vigo County). Introduced to take care of an individual physician of Rush Medical College who had not proper pre-medic requirements. So widely drawn as to lower general requirements of board.

Failure of Beauty Parlor and Barbers' Bills—Both the beauty parlor and the barbers' bills which would have created separate licensing boards for these groups failed to pass. The state association did not oppose these bills but kept close watch to see that nothing was inserted in them which could be construed to infringe on the practice of medicine.

All-Time Health Officer Bill—Failed to pass in Senate where it was introduced through lack of a constitutional majority.

BY THE LEGISLATIVE COMMITTEE,

JOHN H. HEWITT, M.D.,

Chairman.

O. T. SCAMAHORN, M.D.

LOUIS E. FRITSCH, M.D.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASE

Monthly Report, March, 1929

There is a marked increase in the number of reportable diseases sent in by the Health Officers of the State during the month. This increase is especially noted in the five principal communicable diseases, namely, measles, scarlet fever, smallpox, typhoid fever and diphtheria.

The name and number of diseases reported from the urban and rural population are as follows: (urban included cities of 2500 and over, rural all under 2500 population.)

Diseases	Total Reported	Urban	Rural
Tuberculosis	211	129	82
Chickenpox	470	419	51
Measles	2337	1750	587
Scarlet Fever	1456	733	723
Smallpox	380	194	186
Typhoid Fever	41	31	10
Whooping Cough	481	341	140
Diphtheria	142	88	54
Influenza	147	9	138
Pneumonia	30	7	23
Mumps	53	46	7
Poliomyelitis	2	0	2
Cerebro-Spinal Meningitis	2	2	0

Eighty-five counties reported diseases. DeKalb and LaGrange counties made negative reports; Monroe, Wells and Whitley did not report; Brown and Washington never report.

Measles is the most prevalent disease reported. This is to be expected; 2337 cases as against 1258 cases the previous month. This is in keeping with the season's averages. Measles is a spring disease. The estimated expectancy was 2112 cases. The estimated expectancy is based on the experience of the last seven years, including epidemics.

Scarlet Fever is comparable to measles in prevalence. 861 cases the preceding month; 720 cases same month last year, and the average for March during the period is 762 cases. Isolation and quarantine, if done according to law, is 75 percent effective for measles and scarlet fever in epidemics. Every case should be under a physician's care.

Smallpox holds its reputation for prevalence, 226 cases the previous month, and 710 cases the corresponding month the preceding year. The estimated expectancy was 429 cases. The same means for the protection against this disease is still at hand, vaccination.

Typhoid Fever shows a marked increase over the previous month, when only seven cases were reported. If it had not been for Fort Wayne's 29 cases there would have been but seven cases reported. The number of cases from Fort Wayne are inexcusable.

Diphtheria shows an increase over last month, 110 cases were reported. This disease declines as warm weather approaches. The estimated expectancy was 182 cases. Not much of a decline in the face of immunization by toxin-antitoxin.

During the month, the Director investigated an outbreak of scarlet fever at Otterbein and the Hammond venereal disease clinic, as it relates to Lake County. He spoke to the Visiting Nurses Association at their annual meeting in Fort Wayne at which there were 225 women present. Also inspected the venereal disease clinic at Marion.

H. W. MCKANE, M.D.,

Director.

Monthly Report, April, 1929

The reports of the Health Officers of the State during the month show a marked decline over the previous month, except scarlet fever.

Positive reports were received from eighty-five counties. DeKalb and LaGrange made negative reports, while Brown, Wells, Washington, Monroe and Whitley did not report. Every Health Officer is required, by a ruling of the State Board of Health to report each week whether they have communicable diseases to report or not, stating this fact. All Health Officers of the State

of Indiana are under oath to the Federal Government that they will, well and faithfully discharge the duties of their office.

The reporting of diseases are more vital than reporting the deaths. Death reports throw light upon cases of illness that terminate fatally, but throw no light upon those numerous cases of illness where the human body is seriously and many times permanently injured, the efficiency lowered and life shortened. Mortality reporting throws no light upon the great amount of suffering caused by sickness and financial loss to the community, while morbidity reporting will establish a defense against disease that may cause death. It is the missed and hidden cases of disease that are particularly dangerous. It is claimed by some health authorities that the only use made of morbidity statistics at the present time is for administrative purposes and are of practically little value. It is a vital procedure and should be enforced.

Scarlet Fever shows a marked increase, 1819 cases; the previous month 145 cases; the corresponding month the preceding year only 399 cases were reported. The estimated expectancy was 599 cases. The estimated expectancy is based on the experience of the last seven years. February for the period is the peak month for this disease. It seems that immunization against scarlet fever is of noneffect, especially in Indiana.

Measles is the most prevalent disease reported. as was expected. This is measles time, April is the peak month for this disease. One thousand nine hundred twenty-nine cases were reported; the previous month 2337; last year same month 1670 cases. The estimated expectancy was 2488 cases.

Typhoid Fever declined 27 cases this month; 36 cases last month. The normal average for April is 20 cases. If it had not been for Fort Wayne's and Indianapolis' contributions which were 17 cases and 5 cases, respectively, there would have been only five cases for the entire state. Fort Wayne had an accident which accounts for 41 cases during March and April. Twenty-six cases were from the urban population and one case from the rural population. The reverse should be true. Cities have their sterile water and milk.

Smallpox is still in evidence, however, an 85 percent decrease is noted, 205 cases during the month; 380 cases the previous month; the corresponding month the preceding year 515 cases. Smallpox can be prevented and controlled by vaccination and education. Quarantine is very ineffective.

Diphtheria made a very decided decline over the preceding month, 50 cases as against 142 cases. The normal average for April is 150 cases. Diphtheria can be controlled by one word, toxin-antitoxin. Immunization of all pre-school children would solve the problem.

Whooping Cough is a real communicable disease problem. A strict quarantine should be maintained. Parents should be as scared of it as they are of diphtheria and smallpox. Three hundred nineteen cases were reported this month; 481 cases last month. The estimated expectancy was 156 cases. The estimate is made for the last five years. Previous to this time no record was kept of the disease. It is a well known fact that a very small percentage of the cases are reported.

The name and number of diseases not mentioned above that were reported during the month are as follows: Tuberculosis, 159; Chickenpox, 225; Influenza, 61; Pneumonia, 16; Mumps, 33; Poliomyelitis, two cases; Cerebro-Spinal Meningitis, three cases, one each in Floyd, Pulaski and Switzerland Counties. Hydrophobia, one case in LaPorte County; Endameba Histolytica, two cases, one each in Clinton and Lake Counties; Trachoma, five cases, one case in Bartholomew and four cases in Shelby counties. The Director saw the four cases in Shelby County. The diagnosis was chronic catarrhal

conjunctivitis and not trachoma. There are a very few cases of trachoma that occur in Indiana.

During the month, the Director had a conference with Mrs. Lo Emma Chester, Social Worker, U. S. Public Health Service, relative to the control of the venereal diseases in Indiana. Spoke to 4-H club of the Greensburg High School and the Hi-Y of the Y. M. C. A. on Sex Education. Investigated a report of four cases of trachoma in Shelby County. Also spoke to the Maridean W. C. T. U., the adolescent boys club of the Tabernacle Presbyterian Church and the colored Y. M. C. A. on Social Hygiene with film showings. All of these places are in Indianapolis.

H. W. MCKANE, M.D.,
Director.

VANDERBURGH COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Vanderburgh County Medical Society was held at the Evansville Public Health Center, Tuesday, April 9th, at 8:00 p. m.

The meeting was called to order by the president, Dr. H. C. Ruddick. Dr. E. B. Mumford, of Indianapolis, delivered an address on "Common Orthopedic Conditions."

Dr. Joseph E. Wier, formerly of Asheville, North Carolina, and at present a member of the Walker Hospital staff, was made a member of the society by transfer from the Buncombe County Medical Society.

A large number of local physicians and physicians from the tri-state area were in attendance.

The Medical Arts Building for the city of Evansville is practically an assured project. Over fifty physicians and dentists have agreed to accept office space in the building. A site has been selected at the corner of Seventh and Locust Streets. The building will be sixteen stories in height. On the top floor will be an auditorium seating 250 people. In addition to this, there will be a ten-bed emergency hospital. A garage will be in connection with the building. A building of this kind should be erected in every city of any size in the state of Indiana.

Respectfully submitted,
KEITH T. MEYER, M.D.,
Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society met in the Public Library Tuesday, March 26, 8:30 p. m., with Doctor Huffman, the president, in the chair.

Dr. R. B. Acker gave the paper of the evening on "Some phases of Anatomy, Physiology, Pathology and Treatment of Fractures of the Neck of the Femur." From a comprehensive outline on the board, Doctor Acker spoke of the difference in the shape of the head, neck and angle of the femur in children and in adults. He gave the factors of safety and weakness of the neck of the femur, drawing diagrams to illustrate the line of fracture in the young and in the old. He gave the blood supply to the head and neck of the femur, stressing its importance in prognosis, which also depends on the degree of angulation, amount of tearing and impaction; better in the latter because the blood supply is interfered with to the minimum amount.

Doctor Acker stated that in the treatment of old people with fracture of the neck of the femur he had had best success with the Whitman abduction splint, which he has somewhat modified. This relieves the pain and enables the elderly patient to be moved and sit up in bed. He followed his talk with a few x-ray films.

The paper was discussed by Doctors Stoltz, Sullivan, Boling and Hyde.

The meeting adjourned at 10 p. m. to partake of doughnuts, apples and pretzels.

MARTHA BREWER LYON, M. D.,
Assistant Secretary and Treasurer.

The St. Joseph County Medical Society met in the Public Library Tuesday, April 2, 1929, 8:30 p. m., with Doctor Huffman, the President, presiding.

Doctor Shedd reported an interesting case of calcareous degeneration of the vitreous of the eye in a woman of 57 years, which eye had been enucleated because of pain and total blindness. At 4 years of age this eye had been injured and on section it was found the calcareous degeneration had started at site of injury.

The paper of the evening on "Haematuria" was given by Dr. C. C. Hyde. After stressing the many causes of haematuria and treatment, Doctor Hyde made a strong plea for a complete examination of the kidneys and bladder and their appendages in every case of haematuria to determine its source, illustrating by thirteen cases that had this not been done serious conditions would have been overlooked.

Doctor Hyde's paper was discussed by Doctors Bickel, Sullivan, Shedd and Knode.

Doctor Knode spoke of a well-baby conference to be held at the Oliver School under the auspices of visiting nurses and gave the names of the doctors who would conduct these conferences in the different foreign languages for the mothers not speaking English. Since the visiting nurses are trying in every way to cooperate with the medical society and Doctor Knode has been appointed the chairman for the medical society to plan and assist this cooperation, the approval of arrangements was left in his hands.

The following members were elected to the Society: Dr. D. W. Frash, Dr. R. C. Stephens, Dr. P. E. Haley, Dr. C. C. Terry, Jr. and Dr. F. W. Logan.

Doctor Ellison announced that the "Family Meeting" May 1st at the Country Club would be an afternoon of bridge for the women and golf for the men, followed by dinner at 6:30 and dancing later for both. Also, that at the next meeting, April 9, Doctor Giordano would discuss "Rheumatic Fever."

MARTHA BREWER LYON, M. D.,
Assistant Secretary and Treasurer.

MADISON COUNTY MEDICAL SOCIETY

The Madison County Medical Society had a welfare meeting on April 16th, and had as their guests Judge Morrow, the county commissioners, and the fourteen township trustees. Dr. M. A. Austin presented a paper entitled "State Medicine or What?" In this paper Dr. Austin showed that the tendency of the times is towards state medicine, and since medical education has become a part of the state university program it is obvious that centralization will increase gradually. However, in this change from an agricultural to an industrial environment, as Durant expresses it, there are many undesirable facts to be faced and problems to be solved, besides those of companionate marriage, divorce, and women's clothes. Particularly to be condemned is the Peruna type bulletins issued by the so-called extension division of Indiana University. Next to a Holy Roller revivalist, showing up death bed scenes to get converts, are some of the terrible tragedies that the superior service of Riley Hospital have averted, according to the write-ups in these bulletins. Dr. Austin made a compilation of the cases sent from Madison County, the diagnosis, duration of hospitalization, cost to the county, and name of physician sending the case. It was shown that not over half the cases sent from the county were such as required service that could not have been given as suitably and as well in Anderson or Elwood, and at less expense. The county clerk gets a fee of \$5.00 for every case sent to Riley Hospital. Then the county has to pay \$3.30 a day for every day of hospitalization. Eight tonsil cases sent from Elwood cost the county \$180.00, and averaged seven days apiece in the hospital, so the taxpayers paid an average of \$28.00 for each of these cases. Three doctors in the county are

doing all their tonsil work in their offices, and those patients going to the hospital usually leave the same evening. If these were all worthy township poor cases, then the township trustee should have provided for their care at the Mercy Hospital in Elwood, as there are two men in Elwood doing tonsil work. The underlying factor in these impositions on the taxpayers is the so-called welfare and missionary work of various nurses and busybodies who are proselyting for the state hospitals, and implanting the idea of *free medical and surgical care* at the state hospitals.

Then there is the blame that can be placed locally on every physician who sends a case to a state hospital, when that case could and should be taken care of locally. Many physicians send these cases to Indianapolis in order to get rid of a certain amount of responsibility, or in order to get a better stand-in with certain families, or just because they dislike some local competitor who might get the case. Also the trustees have been sending cases to Riley Hospital at the expense of the county as a whole, and thereby conserving their own township funds. And certain pressure influences have been brought to bear upon the circuit judge whereby he has had to send cases to Riley Hospital when he knew there was no need for their going. These matters were all discussed in every particular by Judge Morrow, the county commissioners, and the township trustees, and some of them had never given the matter serious consideration. The Elwood trustee stated he had refused to sign up papers for one case where he knew the father was making over \$300 a month at the tin plate factory. Judge Morrow had his attention called to certain impositions some time ago, and stated that he was requiring everyone who came to him to furnish him with a sworn statement as to the family income and financial resources, unless the physician's claimed that the case was one which could not properly be cared for locally.

The townships pay for patients at Long and Coleman Hospitals, and the county as a whole pays for those going to Riley. Their rate has varied from \$3.30 to \$4.40 a day. St. John's Hospital in Anderson has been charging the township \$10.50 a week or \$1.50 a day.

So many common and unnecessary cases are railroaded into the state hospitals that really interesting, unusual and desirable cases are at times neglected unless it can be shown there is an emergency to admit them. One thyroid case was reported as refusing to have anyone operate upon him here, and after finally getting papers for admission to the Long Hospital, decided to make a visit to Arkansas and stay until he could be admitted, spending more money on his vacation than his hospital bill would have been, or to pay an Indianapolis surgeon for the operation. Such things are only impositions on the taxpayers of the townships and county.

There is a need for the state institutions, and they should care for those unusual and interesting cases of importance in medical instruction, and certain other cases which cannot be cared for as well at any other place, or whose care would work a real hardship to certain families, and there are certain good families who are more entitled to this service than the indigents who are a continued burden and expense to the community.

These matters should be considered in every county society to relieve the present long waiting list at the state hospitals, and keep undesirable cases from being unnecessarily sent to Indianapolis. And on the part of the state institution, if they desire to issue a bulletin, they should send them to the physicians over the state, giving information that could be of real value instead of sob sister effusions such as those that have been broadcast to the laymen.

It was unanimously voted to have Dr. Austin's paper printed in full in THE JOURNAL.

Respectfully submitted,

M. A. AUSTIN, Secretary.

CORRESPONDENCE

A VISIT WITH PROFESSOR DR. K. SHIGA OF KOREA

I had a letter to the Governor General of Korea from Count Chinda of the Japanese Imperial Household, so, upon arrival at Kejo (Seoul) I called on his excellency at once. I was becoming accustomed to the Japanese courtesy by this time, but I shall always remember the extraordinary hospitality and distinction readily and gracefully shown me by the Government officials whom I met in Japan. We visited for an hour at the executive offices. They showed me maps and bulletins, and gave me the history of this old country under new Japanese government.

The Governor's private secretary and his own car and chauffeur were assigned to me during our stay in Kejo. I was asked what particular place I wished to visit and I requested a call on Professor Shiga. An appointment was arranged by telephone and we drove out to the Imperial University Hospital.

The grounds and buildings are extensive and beautiful. New buildings are going up here and there. They are erecting a new psychopathic hospital, an amphitheater, an executive office, a dormitory and several smaller units. The institution is quite new but funds are amply provided by the Government.

I first called on the President of the University and, while we were having a cup of excellent tea, Professor Shiga was announced. He is a man in the early sixties, small in stature and of most pleasing personality. Calm, soft spoken and gentle. We chatted for half an hour and then left the President's office for a tour of the University.

The Professor was dressed in neat, English clothes and carried a stick. I became astonished at his agility and endurance as we climbed stairs, scaffolds, and walked rapidly over long stretches of campus. He almost winded me, and he was talking in excellent English all of the time.

Along the campus and in the college halls we were greeted by military salutes from the students. If a student was wearing his hat, he would stop and remove it. The Professor always returned the salute.

Finally we arrived at his "modest laboratory" which entirely occupies a large building of three stories. Here were rooms for all sorts of bacteriologic and pathologic research. Assistants, technicians, students and orderlies were busy everywhere; with adequate, almost lavish equipment on every hand. It is a most modern and beautiful laboratory unit.

We spent much time in his own research section where he and several assistants are working on syphilis of the central nervous system. The malarial treatment is receiving intensive study. I had spoken to him about some research I had been doing in vascular pathology. At once he was deeply interested. Mounted sections, drawings, microphotographs and extensive minute researches on endothelial cell changes due to infections and toxins were produced. We had a round table conference with assistants who were making studies of this subject. Some times we were obliged to converse in French or German, but often Professor Shiga would have to smile and then interpret Japanese or Korean for me.

I had tried to locate references to this sort of work in American and European laboratories but was not successful. Here in far away Korea I found exactly what I was looking for. Later I may relate a visit to the Siamese pathological laboratories where I found a piece of research on Cobra venom and the endothelium cell which will complete a cycle of most informative work on vascular pathology.

A tray of tea and cakes was served; we smoked and chatted a while, and then started for a walk again, finally stopping at his club when we had some excellent

beer. I was urged to return later and spend all the time I wanted in his laboratory. He gave me carte blanche to every thing including his staff.

Professor Shiga is one of the outstanding men of Japan and also of the medical world. His contributions to science have been important and extensive. He is the chief medical officer of this great University and Hospital in Korea and is profoundly respected by every one about the place. He is modest, gracious, courteous. He is brilliant, a good conversationalist and almost tireless.

I shall regard my visit with him as most pleasant and really inspiring. My memory of him will be one of gratefulness and respect. When I arrived at my hotel I found a large bundle of monographs on his researches; and bulletins on public health; statistical reviews and other valuable papers. A note in the bundle explained that he had not wished to burden me with them during our visit. Burden, indeed! I carried them in my hand luggage for the next four weeks.

C. R. STRICKLAND, M.D.,
Indianapolis.

COMPLIMENTS FOR THE JOURNAL

Monmouth, Ill.,
March 15th, 1929

To the Editor:

I want to thank you for your JOURNAL and I want to assure you that it gives me a full evening's reading each month, for I start in on it and go over it entirely before stopping (unless one of my patients has a pain in the meantime). Your editorials are always snappy, interesting, and to the point and I hope every member of your Society reads them as I do each month.

Yours very cordially,

H. W. CAMP, M.D.,
Sec'y Illinois State Medical Society.
March 7, 1929.

To the Editor:

From time to time I note articles from your STATE JOURNAL in the various medical journals relative to medical economics. The article in the February, 1929, number, which I read here in the Barlow Library, deserves an expression of opinion from those who may be interested in this very important subject.

I wish to thank you for the sentiments therein conveyed and hope my little appreciation of your ideas as printed will not only gratify your own conscience but also encourage you to still further expression in the near future. The article is, of course, part of the aroused sentiment of the profession to wrongs that long since should have been corrected, or at least attempts made to correct. Rexweld Brown's article in the February number of the *Cal. and Western Medicine* is along the same line.

When the profession in Chicago in 1908 began to agitate this subject some effort should have been made to better conditions but, alas, medical politics "squashed" the matter for the time being.

I hope the work of the Wilber Committee will be of some effect but meanwhile the profession should be aroused and the matter thoroughly discussed.

With thanks and encouragement and hoping the matter will not lie dormant especially in view of Harris' recent letter in the JOURNAL, I remain,

Sincerely,

D. S. HAGER, M.D.,
Los Angeles, Calif.

DUPED BY COLLECTION AGENCIES

April 6, 1929.

To the Editor:

I must heartily congratulate you on your many fearless editorials. You surely hit the nail on the head. Keep up your good work.

I have been duped by a collection agency of Columbus, Ohio. Over two years ago they collected for me, among others, an account of about \$70.00, which they did not even notify me was paid.

By correspondence, they claim I neglected to furnish addresses, and give other excuses for not settling.

Of course I cannot recover but would like to publish an article in your Journal. It might help others from having like difficulty.

I have been repeatedly warned to avoid collection agencies, but like a poor fish, I bit.

Respectfully yours,

FRED BIERLY, JR. M.D.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Further information concerning these books will be supplied on request.

Books received since April 1, 1929:

THE NORMAL AND PATHOLOGICAL PHYSIOLOGY OF BONE. By R. Leriche, Prof. de Clinique Chirurgicale a la Faculte de Strasbourg; and A. Policard, Prof. d'Histologie a la Faculte de Lyon. Authorized English translation by Sherwood Moore, M.D. and J. Albert Key, M.D. 236 pages. Illustrated. Cloth. Price 5.00. The C. V. Mosby Company, St. Louis, 1928.

THE CLIMACTERIC. By Gregorio Maranon, Professor of Medical Pathology in the Madrid General Hospital. Translated by K. S. Stevens. Edited by Carey Culbertson, A.B., M.D. 425 pages. Cloth. Price \$6.50. The C. V. Mosby Company, St. Louis, 1929.

TUBERCULOSIS AND HOW TO COMBAT IT. A Book for the Patient. By Francis M. Pottenger, A.M., M.D., LL.D., F.A.C.P. Second edition. 275 pages. Cloth. Price \$2.00. The C. V. Mosby Company, St. Louis, 1928.

BLOOD AND URINE CHEMISTRY. By R. B. H. Gradwohl, M.D., and Ida E. Gradwohl, A.B., Instructor in the Gradwohl School of Laboratory Technic, St. Louis. 542 pages, with 117 illustrations and 4 color plates. Cloth. Price \$10.00. The C. V. Mosby Company, St. Louis, 1928.

YOUTHFUL OLD AGE. By Walter M. Gallichan, with an introduction by Thurman B. Rice, A.M., M.D. 236 pages. Cloth. Price \$2.50. The MacMillan Company, New York, 1929.

LOCAL ANESTHESIA. By Arthur E. Hertzler, A.M., M.D., Ph.D., F.A.C.S., Professor of Surgery in the University of Kansas, etc. Fourth edition. 284 pages with 146 illustrations. Cloth. Price \$6.00. The C. V. Mosby Company, St. Louis, 1928.

CLINICAL ELECTROCARDIOGRAMS. Their interpretation and Significance. By Frederick A. Willius, M.D., Section on Cardiology, Mayo Clinic, Rochester, and Associate Professor of Medicine, Mayo Foundation, University of Minnesota. 219 pages with 368 illustrations. Cloth. Price \$8.00. W. B. Saunders Company, Philadelphia and London, 1929.

WRITING OF MEDICAL PAPERS. By Maud H. Mellish-Wilson, Editor of the Mayo Clinic Publications. Third edition, revised. 184 pages. Cloth. Price \$1.50. W. B. Saunders Company, Philadelphia and London, 1929.

GETTING READY TO BE A MOTHER. By Carolyn Conant Van Blarcom, R.N., formerly assistant superintendent and instructor in Obstetrical Nursing and Care of Infants at the Johns Hopkins Hospital Training School for Nurses, etc. Introduction by J. Clifton Edgar, M.D. Second edition, revised. 285 pages, with 82 illustrations. Cloth. Price \$1.75. The MacMillan Company, New York, 1929.

DEVILS, DRUGS AND DOCTORS. The Story of the

Science of Healing from Medicine-Man to Doctor. By Howard W. Haggard, M.D., Associate Professor of Applied Physiology, Yale University. 405 pages with many illustrations. Cloth. Harper and Brothers, Publishers, New York and London, 1929.

INJECTION TREATMENT OF INTERNAL HEMORRHOIDS. By Marion C. Pruitt, M.D., L.R.C.P., F.R.C.S., F.A.C.S. Associate in Surgery, Medical Department, Emory University, etc. 136 pages. Cloth. Price \$3.00. C. V. Mosby Company, St. Louis, 1929.

HISTORY OF MEDICINE. By Fielding H. Garrison, M.D., Lt. Colonel Medical Corps, U. S. Army, Surgeon-General's office. Fourth edition, revised and enlarged, 996 pages, with 286 portraits and other illustrations. W. B. Saunders Company, Philadelphia and London, 1929. Price \$12.00.

REVIEWS:

GETTING READY TO BE A MOTHER. By Carolyn Conant Van Blarcom, R. N., with introduction by J. Clifton Edgar, M.D. Second edition, revised, with 82 illustrations. Cloth. Price \$1.75. The MacMillan Company, New York, 1929.

This volume, the second edition, completely revised, gives in a clear, understandable manner the information which the expectant mother desires to know. It is essentially a book for the layman and should prove to be of value in giving reliable advice about the simple things which occur during the normal pregnancy. The book is divided into two parts, the first having the general heading "The Baby's Mother", which discusses the various signs of pregnancy, when the baby's life begins, its development, care before arrival, etc. Part two, "The Baby" gives in detail the care of the baby, including food, clothing, daily schedules, common disorders, etc. In the words of J. Clifton Edgar, M.D. "It presents in simple, readable form the facts upon which the best obstetrical practice is based; dispels many doubts, fears and erroneous beliefs; makes clear to the patient the reasons for the directions given by her doctor—the reasons for the watchfulness, the regular examinations, the attention to small matters of daily hygiene which constitute the foundation for healthy motherhood and infancy."

THE WRITING OF MEDICAL PAPERS. By Maud H. Mellish-Wilson, editor of the Mayo Clinic Publications. Third edition, revised. 184 pages. Cloth. Price \$1.50. W. B. Saunders Company, Philadelphia and London, 1929.

This little volume is essentially a handbook adapted to the uses of the writer of medical papers and is a revised edition of the author's previous excellent works. "The subject matter has been arranged in two parts: Specifically Technical, chapters I-VII; and General, chapters VIII to XX."

Chapters I-VII include such titles as vocabulary, italics, abbreviations, punctuation, miscellaneous grammatical notes, etc.

The second part discusses the subject of composition, including subject matter, arrangement, outline, construction, etc.

The book is written in a very clear and concise manner and should prove to be of valuable assistance to any writer of medical subjects.

DEVILS, DRUGS, AND DOCTORS. By Howard W. Haggard, M.D., Associate Professor of Applied Physiology, Yale University; 405 pages with many illustrations from original sources. Cloth. Harper & Brothers, Publishers, New York and London, 1929.

This is a very interesting story concerning the development of the science of healing from early civilization down to the present time. Part I deals with the conquest

of death and birth, and points out that the care given to the child-bearing woman is an index to civilization. It recounts the progress of obstetrics from medieval times, when there was an indifference to the suffering of women, through what the author calls the "filthy ages of faith and fanaticism" down to the period of Oliver Wendell Holmes, who gave the cause of puerperal infection, and, finally, obstetrics as practiced today. Part II is the story of anesthesia, largely devoted to its application to obstetrics. In Part III the progress of surgery is traced from the surgical operations of ancient Egypt down to Lister's antiseptic principles, Pasteur's discoveries, and present day teaching of the prevention of infection in modern surgery. Part IV gives a history of the various plagues and pestilences, including bubonic plague, malaria, Asiatic cholera, smallpox, and lastly a discussion of the spread of syphilis and gonorrhea and progress in sociological, moral and medical aspects in its eradication and cure. In this section, prostitution is discussed, including its growth and tolerance by law, as also under ecclesiastical control, and futile attempts to suppress it. In Part V the various healing faiths are discussed, including the cults. Christian Science is discussed under the chapter entitled "White Magic and Black." The employment of drugs forms another chapter and a final chapter is devoted to treatment giving way to prevention. Part VI is devoted to medicine through the ages, and a suggestion of the possibilities of scientific medicine of the present day. At the conclusion is a pessimistic note to the effect that medicine depends upon advancing civilization, and civilization is prone to regress.

GYNECOLOGY. By Howard A. Kelly, A.B., M.D., LL.D., and collaborators. 1043 pages, profusely illustrated. Cloth. D. Appleton & Company, New York and London, 1928.

The name of Howard A. Kelly attached to any work on gynecology probably spells success for that book, if we are to judge by the frequency with which our friends in gynecological practice advise us that they have purchased the book. A superficial examination of the text indicates that the book is admirably written, well illustrated and is comprehensive. The text represents the collaboration of several well-known men. As one prominent gynecologist says, "Anything that Howard Kelly edits is worthy of the attention of gynecologic surgeons."

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

LIOIODINE-CIBA—(New and Nonofficial Remedies, 1928, p. 215).—In the form of Lioiodine-Ciba, Diagnostic, it is used as a contrast medium in the localization of bronchial and pulmonary lesions, as a diagnostic aid in gynecology and myelography, for detecting urethral strictures, and in cavities where intensification of the roentgen ray shadows is desired. The dosage for diagnostic work is from 5 to 20 cc. of Lioiodine-Ciba, Diagnostic, as determined by the extent of the field to be investigated. Ciba Co., Inc., New York.

LIOIODINE-CIBA DIAGNOSTIC.—A 60 percent solution of Lioiodine-Ciba (New and Nonofficial Remedies, 1928, p. 215) in sesame oil. Ciba Co., Inc., New York

ÂMPULES LIOIODINE-CIBA DIAGNOSTIC, 5 CC.—Each ampoule contains 5 cc. of a 60 percent solution of Lioiodine-Ciba (New and Nonofficial Remedies, 1928, p. 215) in sesame oil. Ciba Co., Inc., New York.

ACIDOPHILUS BACILLUS LIQUID—MULFORD.—A whey culture of *B. acidophilus* (Moro) in a whey medium, which contains 50 million viable organisms per cc. at the time of sale. For a discussion of the actions and uses of bacillus acidophilus preparations see Lactic Acid Producing Organisms and Preparations, (New and Nonofficial Remedies, 1928, p. 228). H. K. Mulford Co.,

Philadelphia. (*Journal of the A. M. A.*, March 2, 1929, p. 723).

DIAL-CIBA.—**DIALYLBARBITURIC ACID.**—Dial-Ciba differs from barbital (diethylbarbituric acid) in that both of the ethyl groups of the latter are replaced by allyl groups. The actions and uses of Dial-Ciba are essentially similar to those of barbital, but Dial-Ciba is more active than barbital and it is used in correspondingly smaller doses. Fractional doses are used as a sedative and larger doses as a hypnotic. The hypnotic action is induced within one-half to one hour. As a sedative the dosage is 0.02 to 0.04 Gm. two or three times daily; as a hypnotic 0.1 to 0.3 Gm. one-half to one hour before sleep is desired. The product is supplied in powder, in Tablets Dial-Ciba, 0.1 Gm. and as Elixir Dial-Ciba containing 0.05 Gm. per 4 cc. Ciba Co., Inc., New York. (*Journal of the A. M. A.*, March 23, 1929, p. 983).

PROPAGANDA AND REFORM

REDUC-IT, A NOSTRUM FOR REDUCING HIGH BLOOD PRESSURE.—The Denver Research Laboratory of Denver, Col. put out a preparation which, it was claimed, would reduce high blood pressure. It was called "Reduc-it." It was claimed that the preparation would "Prevent apoplexy, paralysis, Bright's disease, rheumatism, eczema, boils, pimples and many other diseases caused from high blood pressure and impure blood." The post office authorities have issued a fraud order excluding the Denver Research Laboratory from the use of the mails. The "Denver Research Laboratory" was not a laboratory at all. It was a trade name adopted by one Gilliard W. John, who conducted the business from a "one-room-and-bath apartment" occupied by himself and his wife. The preparation, *Reduc-it*, was made up of equal parts of cream of tartar, epsom salt and magnesium carbonate. (*Journal of the A. M. A.*, March 2, 1929, p. 743).

J. BAPTIST BUTTS, ANOTHER HIGH-BLOOD-PRESSURE SPECIALTY.—A two-page letter printed in imitation type-writing asked the recipient to read Dr. Butts' essay on high blood pressure. It closed with the offer to send "complete directions for making the remedy" which had cured Dr. Butts, on receipt of five dollars. Dr. Butts offered to return the money if the remedy would not do what he said it would. Apparently, Dr. Butts does not confine the sale of his formula to the medical profession. One layman writes that he gave the remedy a trial with no benefit whatever and that his request for a refund was not complied with. The following is the formula of Dr. Butts' epoch-making discovery: "Take a fresh beef kidney and a pound of fresh beef liver. Cut the kidney into strips, separating the dark outside meat from the inner fatty, fibrous part. Cut into small pieces and put in a mild solution of salt water for an hour. Rinse through a collander. Cut the liver into small pieces and put it and the kidney in a double cooker, with a quart of water. Cook with as little heat as possible for three hours, being careful that the lower part of the cooker does not boil dry. Press out the liquid. If less than a quart add water to make up deficiency. When cold add enough salt to overcome the insipid taste. Then add cider vinegar until it has an acid taste. Keep in a cool place. Dose, a 2 ounce wine glassful with the juice of an orange, morning and evening." (*Journal of the A. M. A.*, March 2, 1929, p. 743).

ERGOSTEROL AND CATHODE RAYS.—It has been shown that the high voltage cathode rays developed by Coolidge also may transfer antirachitic potency to ergosterol and substances containing it. The experiments showed that this sterol exposed to cathode rays is not rendered as potent as when subjected to ultraviolet irradiation from a mercury vapor quartz lamp. These experiments indicate that the antirachitic properties produced by cathode rays are not due to exposure to ultra-

violet radiation produced by the rays themselves. (*Journal of the A. M. A.*, March 9, 1929, p. 810).

MORE DENTO-MEDICAL QUACKERY.—The latest reports of the chemist of the American Dental Association to the dental profession deal with X-It, a pyorrhea remedy, and "Ore-Noid," said to be a "synthetic saliva" preparation. X-It (X-It Laboratories, New York City) is advertised both to dentists and the public. No information is given in regard to the composition of the product, so that the dentist who uses it assumes the responsibility in applying a preparation about which he must know little. The analysis brought out that X-It is, essentially, compound tincture of benzoin, with a small amount of zinc chloride, flavored with oil of wintergreen. Ora-Noid, according to the Ora-Noid Co. of Chicago may be "roughly defined as a Synthetic Saliva." The chief men behind the Ora-Noid Co. seem to be an attorney and a man connected with a furniture forwarding company. It is claimed that Dr. Otto A. Keller of Chicago developed the Ora-Noid method and discovered "the ideal proportions in which to mix the various vegetables and mineral salts so as to build up the saliva to its highest potency." Just who Dr. Otto A. Keller is, is not clear. The American Dental Association chemist found that Ora-Noid was strongly alkaline, in marked contrast to normal saliva, which is usually faintly acid, and that, while saliva digests starch, Ora-Noid, under identical conditions, did not do so. The chemist also found that Ora-Noid was essentially a mixture of table salt, baking soda, chalk, magnesia, starch and borax. (*Journal of the A. M. A.*, March 9, 1929, p. 828).

ANTISCARLET FEVER PREPARATIONS.—Scarlet fever streptococcus antitoxin is a horse serum preparation. It should be used only in those persons who are susceptible and already infected so that they are in danger of developing scarlet fever at once. The protection conferred by the prophylactic dose of antitoxin is transient. Scarlet fever streptococcus toxin does not contain horse serum. It should be used in five graduated doses for active immunization of susceptible persons who do not already have scarlet fever. (*Journal of the A. M. A.*, March 9, 1929, p. 830).

THE NINHYDRIN TEST IN PREGNANCY.—The Abderhalden Ninhydrin test for pregnancy has fallen into disrepute. There is no evidence that a specific ferment exists in pregnancy. While tests on serum from pregnant women are uniformly positive, the large number of positive results on the serum of men and nonpregnant women proved the test of no value for the diagnosis of pregnancy. (*Journal of the A. M. A.*, March 9, 1929, p. 829).

MOUTH WASHES AND DENTIFRICES.—No where is scientific thought and even honesty more disregarded than in the pseudobiochemical propaganda inseparably connected with the exploitation of dentifrices and mouth washes. Consider for instance what advertising writers are pleased to term "acid mouth." It is well known but not often admitted in the propaganda of certain dentifrice manufacturers that the pH level of the saliva is maintained regardless of the material introduced into it. Dentifrices of both acid and alkaline nature are sold with the claims that they will correct all sorts of supposed conditions in the mouth. Many of the alkaline dentifrices, presumably designed to correct mouth acidity (which in a sense is the normal condition), are especially blatant in their announcements. If an abnormal acid or alkaline condition is present in the mouth, there is probably an underlying constitutional cause which should have the expert attention of physician and dentist. Sooner or later, manufacturers of dentifrices will have to heed the results of scientific investigation. The chief purpose of a dentifrice is to clean the teeth, or more practically, to establish a

healthy habit. The balance of evidence is against the view that dentifrices can be used for so-called mouth correction. (*Journal of the A. M. A.*, March 16, 1929, p. 899).

THE QUESTIONNAIRE NUISANCE.—One of the many by-products of the modern art of advertising is the advertising agency, whose business it is to prepare advertising campaigns for those who wish to cry their wares in the market places. Out of the business of preparing advertising campaigns has grown one of the most intolerable nuisances that ever plagued the medical profession—the questionnaire. The fault rests primarily on those members of the profession who, with easy-going tolerance, give for the asking expert opinions that are based on much work and special study. Some of these questionnaires come frankly from advertising agencies; others, although also emanating from advertising agencies, are camouflaged with names such as "research" or "bureau." The following are some of the questionnaires with which the medical profession has been plagued during recent years: Lord and Thomas, advertising agents of Los Angeles, sent letters to dermatologists in the interest of the California Fruit Growers Association on the effects of lemon juice when used as a hair rinse. Lord and Thomas and Logan, New York, circularized physicians in the interest of the manufacturers of "Lucky Strike Cigarettes." Williams and Cunyngham, an advertising agency, went to the profession seeking advertising data on asthma and hay fever. Physicians received a questionnaire from "The Editors" of the *Medical Review of Reviews*, addressed to dermatologists regarding a survey of methods of washing the hands to insure freedom from skin diseases, preservation of line and contour, etc. The National Research Bureau of Cincinnati (a fancy name used by Proctor and Collier Co., an advertising agency) also sent out a questionnaire to dermatologists. A questionnaire was sent out by the "Medical Research Bureau" of New York, dealing with the use and prescribing of sedatives, the data to be used by John B. Daniels, Inc., Atlanta, Ga., makers of Pasadyne. A questionnaire was sent out by the "Medical Research Bureau" of Chicago in regard to a profit-sharing method of supplying drugs in quantities direct from the wholesaler. Physicians should consign to the wastebasket every questionnaire that asks for free advice and comes from commercial or unknown sources. (*Journal of the A. M. A.*, March 23, 1929, p. 1004).

VACCINES FOR PREVENTION OF MENINGITIS.—The use of vaccines for the prevention of epidemic meningitis has not been extensive enough to establish any definite general medical opinion in regard to its value. (*Journal of the A. M. A.*, March 23, 1929, p. 1008).

EPHEDRINE HYDROCHLORIDE-PITMAN-MOORE CO.—None of the ephedrine products of Pitman-Moore Co. have been accepted by the Council on Pharmacy and Chemistry. The statement given in the advertising of the Pitman-Moore Co. that the ephedrine hydrochloride was the first to be accepted by the Council on Pharmacy and Chemistry is in itself true; but the inference that the *Pitman-Moore Co. brand* of ephedrine hydrochloride has been accepted by the Council is unfair. As ephedrine is susceptible to unusual reactions, physicians will do well to confine their prescriptions to brands of ephedrine which have been admitted to New and Nonofficial Remedies. (*Journal of the A. M. A.*, March 23, 1929, p. 1009).

MEDICAL PRESCRIPTIONS OF ALCOHOL.—During 1928, 68,951 physicians used prescription books as contrasted with 48,097 in 1927. The number of licensed physicians in those states which permit the use of liquor for medicinal purposes is 116,756, so that a little more than one-half the total number of physicians permitted to prescribe alcoholic liquors avail themselves of the

(Continued on Adv. p. xx.)

TO Oculists . . .



*See with greater
comfort and clarity
through Tillyer Lenses.*

A PHILADELPHIA dispenser who fits 80% Tillyer Lenses (by the advice and consent of several leading Philadelphia oculists) became a Tillyer enthusiast by way of his own eyes. Furthermore, several of his valued patients tried Tillyer Lenses, and proved the difference. Wearers actually experience more comfortable vision with them, and you can readily understand why this is true. The more precisely your prescription is filled, the better your vision. Tillyer Lenses are new, and they are better—you and your patients should change to Tillyer Lenses.

AMERICAN OPTICAL COMPANY
TILLYER LENSES

Accurate to the very edge

TRUTH ABOUT MEDICINES

(Continued from page 226)

opportunity. Slightly more than 10 percent of all the physicians who might prescribe alcoholic liquors used the total number of prescriptions afforded them by the government. The total number of prescriptions issued during the year increased from more than eight million in 1922 to approximately thirteen and a half million in 1925 and then decreased to less than twelve million in 1927. At the close of the year the number of outstanding permits of this kind had increased to 101,052. (*Journal of the A. M. A.*, March 30, 1929, p. 1130).

"COUNCIL PASSED"

Notification is being sent to the medical profession that the well known and deservedly popular Haley's M-O, Magnesia Oil has been accepted for N. N. R. of the American Medical Association. Henceforth the product will be known as Magnesia-Mineral Oil (25) Haley.

It was certainly a happy thought to combine Liquid Petrolatum and Milk of Magnesia in the form of a permanent, uniform, unflavored emulsion. The taste is not at all unpleasant and the absence of any distinct flavor prevents the habitual user from growing tired of it.

The value of mineral oil as a lubricant and emollient for the treatment of certain forms of obstipation has been well established. In many cases, however, there is added to the need for lubrication the indication for the use of a mild laxative and antacid for which purpose years of clinical use have demonstrated Milk of Magnesia to be ideal.

Practically, there exists in many cases of intestinal stasis and constipation a hyperacid condition which calls for the use of an antacid.

Magnesia-Mineral Oil (25) Haley has therefore a therapeutic field considerably broader and more diversified than is the case with either one of its ingredients considered singly.

The makers of this product, were prompt to realize this but were also well aware that skepticism or doubt is apt to be aroused when the number of indications for the product is large.

As evidence of good faith and entirely in the interests of the medical profession, numerous questionnaires have been sent out from time to time, giving the physician an opportunity to indicate exactly under what conditions his use of Magnesia-Mineral Oil (25) Haley proved most satisfactory.

Tabulations have been carefully made of the replies received from physicians and only those indications mentioned in the literature which proved to have been common to a large number of doctors. In this way it is believed, undue claims have been avoided and the doctors have been given reliable information based upon actual clinical use.

The same method has been employed in the use of the dental profession, because dentists have been prompt to recognize the value of Magnesia-Mineral Oil (25) Haley as an antacid mouth wash.

The advertising of this product has been kept within strictly ethical limits. The mails have been used regularly and, judging from the comments received from thousands of physicians, the attempt to call attention to Magnesia-Mineral Oil (25) Haley by the use of something different and original in the form of printed matter has been well received. The little booklet, "A Gift from the Gods" met with a very flattering reception and in the near future another feature will be sent to every physician in this country which will undoubtedly be not only welcome but given a permanent place in the doctor's waiting room, private office or home.

QUALITY AND SERVICE

HAVE GIVEN US PRESTIGE
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THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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ORIGINAL ARTICLES

POLLEN SURVEY OF INDIANA* (PRELIMINARY REPORT)

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INDIANAPOLIS

The role of wind-borne pollen in the etiology of hay-fever is so well established that it is quite unnecessary to quote references, and Duke¹ has definitely stated that "the disagreeable symptoms

excursions into various parts of the state and air studies carried on in and near Indianapolis. A study of atmospheric ragweed pollen incidence in Indianapolis during the season of 1926 was made by Dr. Thurman B. Rice, and during the past season with the aid of the U. S. Weather Bureau in exposing slides, a seasonal atmospheric pollen record was secured, and ragweed data was obtained from a point eight miles from the center of the city near Valley Mills. It has been found



FIGURE 1

Fig. 1. Short Ragweed (*Ambrosia elatior*) is common in all parts of Indiana, growing in waste places and especially in grain fields after harvest.

observed in patients suffering from sensitiveness to pollen vary with the pollen content of the air". It is therefore of the greatest importance to have not only accurate information concerning the geographical distribution of wind-pollinated plants but also seasonal records of atmospheric pollen incidence. Conditions affecting the production and distribution of pollen vary so greatly that each locality must be studied by itself, and in the light of findings in other parts of the country.

This report is based on field studies conducted in the vicinity of Indianapolis, supplemented with

*From the Botanical Laboratories of Swan-Myers Company.



FIGURE 2

Fig. 2. Giant Ragweed (*Ambrosia trifida*) grows only in moist soil, in ditches and river bottoms, sometimes attaining a height of 14 ft. It is not so common as short ragweed, but produces pollen more abundantly and is therefore fully as responsible for fall hay-fever as is short ragweed.

necessary in conducting a pollen survey to correlate the field and air work as closely as possible². This has been done in this instance, so that pollen found on the slides was always checked with that which was known to be in bloom in the field. In some instances this resulted in finding on the slides, pollens which had been blown from points outside the state.

Table No. 1 is a field check of all common Indiana members of families known to be important in allergy. Only wind-pollinated plants are

included, thus omitting clovers, goldenrod, sunflower and all other insect-pollinated plants. An effort is made on the table to arrange both the groups and the individuals in each group in the order of their probable importance. The calendar of dates of pollination (Table No. 2) must neces-

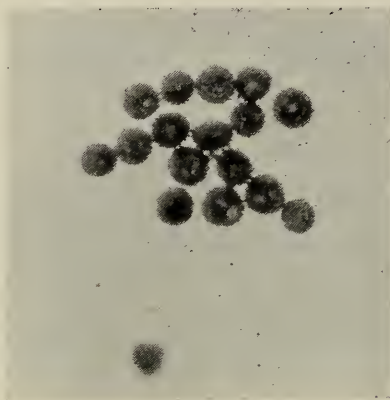


FIGURE 3

Fig. 3. Pollen of short Ragweed, magnified about 150 times. Diameter of this granule is about 20 microns.

sarily be local, as the difference in season between the north and south parts of Indiana amounts to more than a week. Even in a given locality, weather conditions have considerable influence on

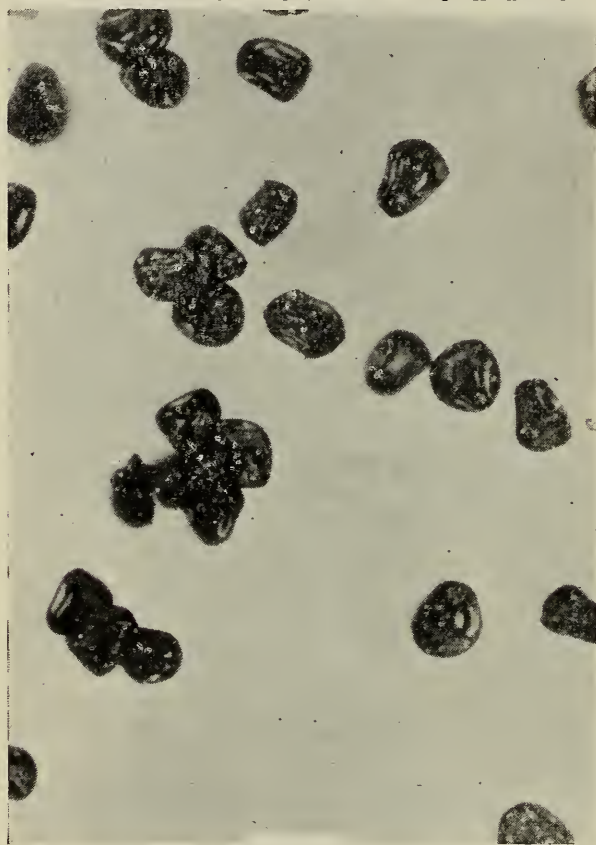


FIGURE 4

Fig. 4. Pollen of Timothy, magnified about 150 times. The appearance of the timothy pollen granule is typical of all grass pollens.

the exact dates at which the early trees bloom. Later in the spring and summer there is less variation in the dates of pollination, and the fall weeds are noted for their adherence to schedule.

It will be seen from the comparative ragweed studies made in 1926 and 1928 in Indianapolis (Fig. 5), that the date of onset of the season was almost exactly the same both years. This is in accordance with similar studies, made in other parts of the country. It will also be seen from Figure 6 that the ragweed matured at the same time in Chicago and Toledo as in Indianapolis.

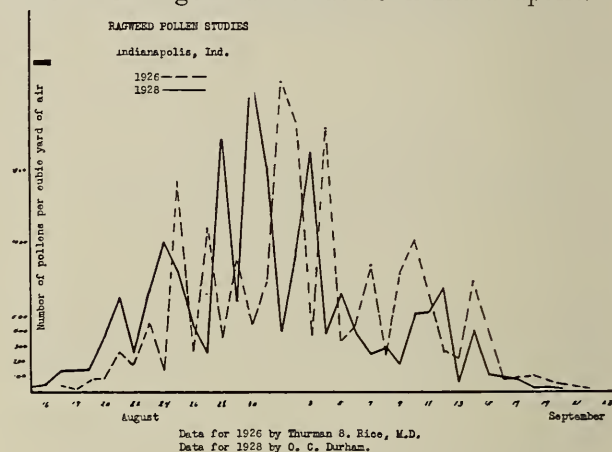


FIGURE 5

Fig. 5. Two Ragweed Seasons in Indianapolis. The slides were exposed on the roof of the Merchants Bank Bldg. in 1926 and on the roof of the Consolidated Bldg. by the U. S. Weather Bureau in 1928. The two locations are about two blocks apart and the buildings about the same height. The onset and apex of the season were about two days earlier and the termination of the season about one day earlier in 1928 than in 1926.

Details of the method of making the air studies have been published elsewhere.³ Vaseline coated slides, which have been exposed out of doors for twenty-four hours, are examined under the microscope and a differential and quantitative count made of all pollens found on a unit area (1.8 square centimeters) of the slide. Knowing the av-

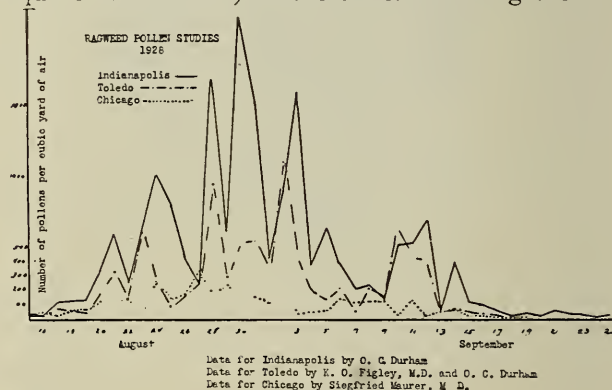


FIGURE 6

Fig. 6. The Ragweed Season in Indianapolis compared with Chicago and Toledo. The slides in the latter two stations were exposed in the residence portion of each city respectively. The general character of the graph in each place is the same, weather conditions usually being about the same over the entire district. The Chicago record is much lower due to the presence of the lake on one side and the long distance to open country on the other three sides.

erage size of the ragweed pollen granule, by a simple formula based on the rate of fall of small particles, we may easily translate the results to the number of pollens per cubic yard of air.⁴ The wind is the most important factor in pollen distribution. Our highest pollen counts are on days of

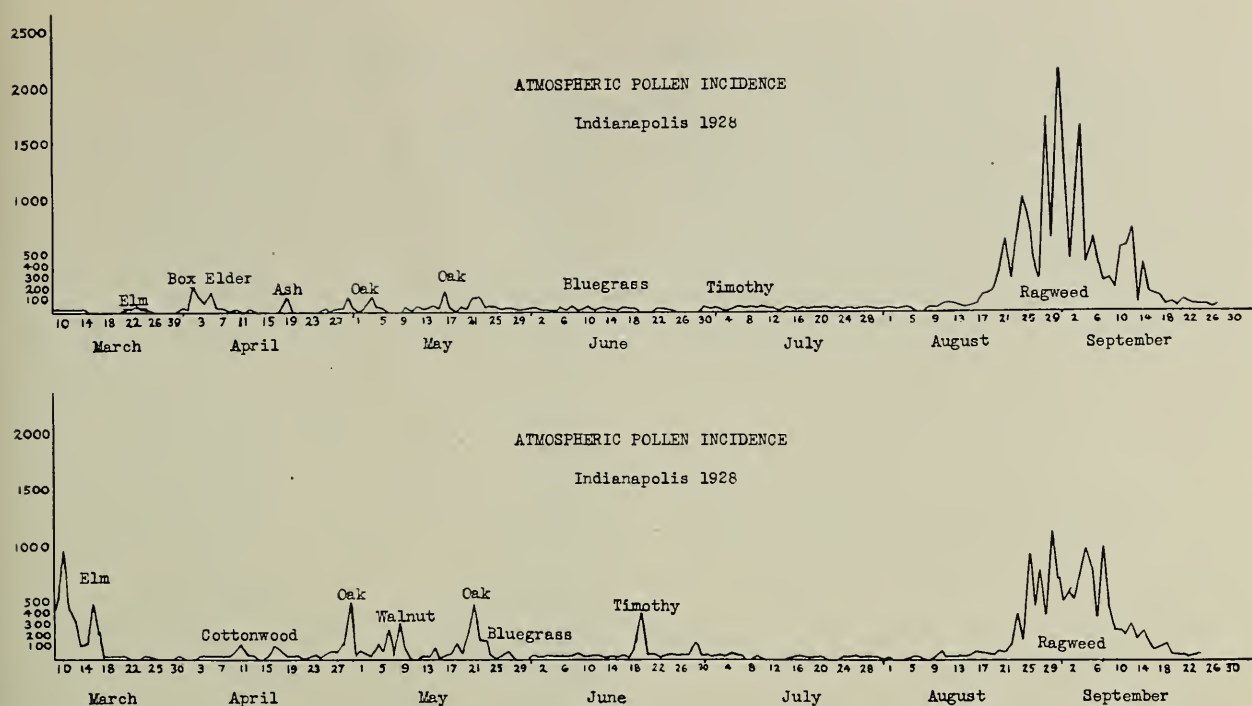


FIGURE 7

Fig. 7. Seasonal Record of Atmospheric Pollen Incidence for Indianapolis 1928 compared with Kansas City 1927. These two graphs testify most eloquently to the relative importance of ragweed pollen compared with either the grass or tree pollens.

highest wind velocity. It so happens that our strong winds are usually from the southwest preceding a storm period. It is fortunate that we have data from other localities with which to compare Indiana findings.

One is surprised at the small amount of tree pollen found on the slides (Fig. 7) in view of the wide distribution of the various trees. It seems that last season was especially unfavorable to the distribution of the tree pollens. The tree season lasts about three months. Oaks produced the largest amount of pollen found on the Indianapolis slides, while in Kansas City elm was most abundant.

There are two distinct grass seasons. During the first two weeks of June bluegrass and orchard grass are in bloom, and timothy, redtop and Canada bluegrass have a season of their own during the first three weeks of July. The air is comparatively free from pollen during the last week of July and the first week of August.

Field observations alone could never establish the overwhelming importance of ragweeds, but from the air records it is easily seen that ragweed deserves all the importance which has been attached to it. In the vicinity of Indianapolis there are only two important species of ragweed, short ragweed (*Ambrosia elatior*) and giant ragweed (*Ambrosia trifida*). Cocklebur (*Xanthium* spp.), while a member of the ragweed group and producing a pollen comparable in quality to the other ragweeds, is not prevalent enough to merit a great

deal of attention. In the southeast part of the state are two additional ragweeds; Southern ragweed (*Ambrosia bidentata*) which is found to within forty miles of Indianapolis, common in dry pastures, and which produces considerable pollen, and marsh elder (*Iva ciliata*) which is found in river bottom land in the same portion of the state. These plants are interesting in view of their being plentiful over the southern half of Illinois, most of Missouri, and the latter to the Gulf of Mexico. In the extreme northwest corner of the state, burweed marsh elder (*Iva xanthifolia*), also called prairie ragweed, is becoming common.

Aside from the ragweeds there does not seem to be any weed of importance in the vicinity of Indianapolis. Members of the amaranth and goosefoot families are present, but are not abundant enough to be given serious consideration. Annual sage is very common in Indianapolis, but is not found in the country or smaller towns. It is abundant also in Louisville, Cincinnati and a number of southern cities. Its period of pollination is quite late and very little of its pollen was found on the slides. Belonging to a group which is known to be important in allergy, this weed should receive some attention.

From the amount of ragweed pollen found on the slides exposed by the Weather Bureau, it is calculated that during the ragweed season last fall the air above Indianapolis carried a total of more than three tons of ragweed pollen. It is hard to visualize the enormous amount of this

invisible, though highly toxic material, which pollutes the air each season. Comparative figures (Fig. 8) indicate that Indianapolis because of its surrounding agricultural districts, is one of the most unfavorable places in the United States for ragweed pollen sensitive persons. Since the amount of ragweed pollen encountered in the city (Fig. 9) is only about one-half of that found in the country, it has been suggested that some good could be accomplished by a rigid enforcement of the weed laws within the city, but it is evident that if every weed within the city limits were de-

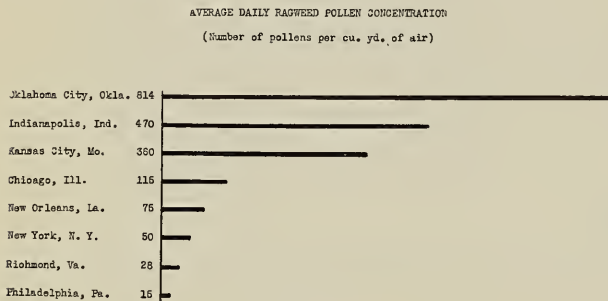


FIGURE 8

Fig. 8. Comparative standing of various cities, showing the average ragweed pollen content of the air during the fall hay-fever season.

stroyed, enormous amounts of pollen would be blown in from the country and the situation would not be materially improved. The most abundant growth of ragweeds in the country is on grain fields from which the crop has been removed. Usually these fields are not molested in any way after the grain is harvested, and there would seem to be no practical remedy for this condition.

The Indiana pollen situation is a challenge to the medical profession of the state.

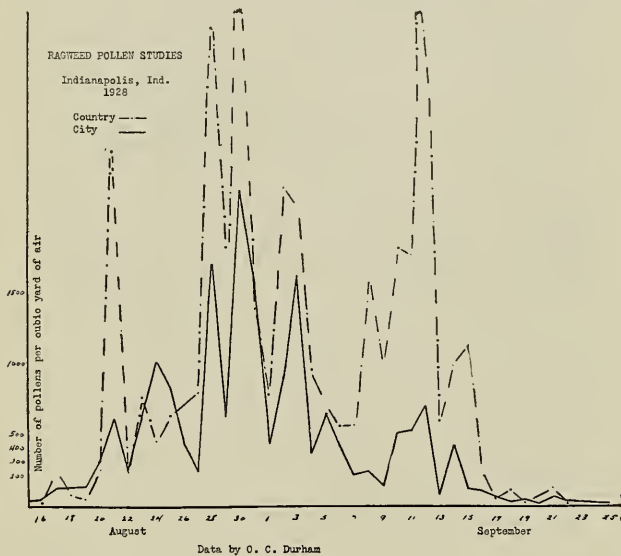


FIGURE 9

Fig. 9. Comparison of the ragweed pollen found in the heart of Indianapolis with that found at a point five miles from the city limits. The total for the season shows twice as much on the country slides as on those exposed by the U. S. Weather Bureau in the city.

TABLE No. 1

HAY-FEVER FLORA OF INDIANA

Common Name	Botanical Name
Ragweeds	Ambrosiaceae
Short Ragweed	Ambrosia elatior
Giant Ragweed	Ambrosia trifida
Southern Ragweed	Ambrosia bidentata
Cocklebur	Xanthium spp.
Marsh Elder	Iva ciliata
Burweed Marsh Elder	Iva xanthifolia
Grasses	Gramineae
Bluegrass	Poa pratensis
Timothy	Phleum pratense
Canada Bluegrass	Poa compressa
Redtop	Agrostis palustris
Orchard Grass	Dactylis glomerata
Corn	Zea mays
Crab Grass	Syntherisma sanguinalis
Trees	
Oak	Quercus spp.
Box Elder	Acer negundo
Elm	Ulmus spp.
Walnut	Juglans nigra
Birch	Betula spp.
Sycamore	Platanus occidentalis
Cottonwood	Populus deltoides
Maple	Acer saccharinum
Hickory	Hicoria spp.
Pine	Pinus spp.
Wormwoods	Artemisia annua
Annual Sage	Chenopodiaceae
Chenopods	Chenopodium album
Lamb's Quarter	Salsola pestifer
*Russian Thistle	Amaranthaceae
Carelessweeds	Amaranthus retroflexus
Pigweed	Acnida tamariscina
Western Water Hemp	Acnida tuberculata
Water Hemp	Plantago
Plantains	Plantago lanceolata
English Plantain	Plantago major
Common Plantain	Rumex
Docks	Rumex acetosella
Red Sorrel	Rumex crispus
Yellow Dock	
Miscellaneous	Cannabis sativa
Hemp	

The groups and individuals of each group are listed in the order of their probable importance from an allergic standpoint.

TABLE No. 2

CALENDAR OF POLLINATION

	Mar	Apr	May	June	July	Aug	Sept.
Maple	xx	x					
Elm		x					
Box Elder		xxxx					
Cottonwood		xxx	x				
Ash		xxx	x				
Oak			xxxx				
Walnut			xxx	xx			
Yellow Dock			xx	xx			
Hickory			xx	x			
Red Sorrel			xx	x			
Blue Grass			x	x			
English Plantain				xxxx	xxx		
Orchard Grass			xx				
Canada Bluegrass				xx			
Timothy					x	xxx	
Lamb's Quarter				xxxx	xxx	xxx	xxx
Spiny Amaranth				xxxx	xxx	xxx	xxx
Redtop				xx			
Pigweed					xx	xxxx	
Western Water Hemp					xx	xxxx	xx
Hemp					x	xxxx	xxx
Corn						xx	
Cocklebur						xxxx	xx
Giant Ragweed						xxx	xx
Short Ragweed						xx	xxx
Southern Ragweed						xx	x
Marsh Elder							x
Crab Grass							xxxx
Annual Sage							xx

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* of very restricted local distribution.
x indicates approximately one week. Dates are for Indianapolis.

GLIOMA*

D. A. BARTLEY, M.D.
INDIANAPOLIS

Glioma of the retina is a malignant, non-pigmented, intra-ocular tumor occurring in early life. The characteristic clinical behavior and peculiar structure render glioma of the retina one of the most striking examples of a specific tumor process. The rapid growth, extreme malignancy of the tumor and youth of the patient are the outstanding clinical features. This paper will be confined to gliomata of the retina only, with particular consideration given to the pathology.

The name glioma retinae was originated by Virchow (1864), who interpreted the neoplasm as a malignant growth of the retinal glia tissue. The tumor was observed by physicians of ancient times, who called all malignant tumors cancer. The subject of cancer is treated in the Papyrus Ebers (1650 B. C.), and in the earliest literature of Persia, India and Babylonia. Cancer of various parts of the body are discussed with their methods of treatment. The latter included: (1) various escharotics; (2) arsenical paste; (3) excision of the part; (4) ligation of vessels; (5) Hippocrates used the actual cautery (the earliest record of the use diathermy); and (6) the employment of various incantations and religious rites agreeable to the mind of the priest-physician in attendance. No success was had with the treatment of intra-ocular and orbital neoplasms.

The theory of the cause of disease was bizarre and haphazard in ancient times, and we find their conception of neoplasms to be likewise. The humoral theory of the cause of disease was usually attributed to all conditions including cancer; also, an excess of blood; or a deficient quantity of blood; disturbances in the flow of lymph, or the color of the bile. One extraneous cause commonly given for cancer was the eating of black walnuts.

The period of the Renaissance (1500-1700) was the period of awakening in medicine, the spread of knowledge being facilitated by the invention of the printing press. The discovery of the circulation of the blood by Harvey (1628 A. D.) was the real beginning of experimental physiology and pathology. The religious and esthetic tendencies of the race, which had prevented a proper understanding of the function and structure of the human body, were being overcome. Man was beginning to inquire into the problems of disease and deranged function of the body. We find them making inquiry regarding neoplasms.

At the close of the period of the Renaissance we find the first authentic record of a case of glioma retinae (Hayes 1767). This was rapidly followed by Wardrope (1809), who gave the first clinical description; and Robin (1854), who gave

the first accurate histological description of the tumor (Parsons).

The terminology employed was descriptive of the gross appearances. We find, *medullary cancer*, *fungus haematoides* in the first literature, then Laennec (1819) named them *enphalomata* from the close resemblance to brain tissue. Beer (1819) named them *amaurotic cat's eye*, due to the peculiar reflex from the pupil. Later, when histological study was more universally made with debate as to the kind of tissue and origin, we find them named small round cell sarcomata, glio-sarcomata, glioma retinae and neuro-epitheliomata, (Wintersteiner 1897). The evolution of terminology to find a suitable name was continued to the present time. Mawas, in the French literature (1925) proposed *retinocytoma*, as a name description of the embryonal type of cell, but it also implies cyst formation. Verhoeff suggested the name *retinoblastoma*. This was adopted by the American Ophthalmological Society and will be the name employed in the future. This name is in accord with Mallory's classification of tumors as blastomata. The prefix indicates the tissue from which the tumor originated.

The literature would begin with the writings of Verdrov (1864), except the works already mentioned of Hays, Wardrop, and Robin. It was Verdrov who determined glia tissue to be present in the tumors and gave the name glioma retinae. Hirschberg (1869) published an extensive monograph. Knapp (1828) published a book on intra-ocular tumors which treats extensively of glioma and DeGama Pinto (1866) also wrote a book on tumors, in which he gave considerable space to glioma retinae. Wintersteiner (1897) published an extensive monograph on glioma in which he introduced the name neuro-epithelioma, his contention being that the tumor arises from the neuro-epithelial cells of the retina. Wintersteiner cited 'rosette formation' as one of their microscopic characteristics; but this formation had been found by previous investigators. LaGrange (1901) published a book entitled "Tumors of the Eye". The literature is now very extensive, but the above men gave us the organized conception of the subject as we have it today.

Glioma retinae comprises about 0.04 percent of all diseases of the eye (Wintersteiner-Parsons). Sex has no influence on the incidence of the disease. Either eye may be affected, and it is bilateral in 25 percent of the cases. The growth in the second eye is an independent focus, and there is no extension of the disease through the chiasma. The early years of life show the largest number of patients, the number decreasing with each added year of life, until the age of sixteen is reached, after which glioma retinae has not been known to occur.

Two-thirds of the cases occur before the fourth year of life. Children have been born with glioma retinae. A gliomatous tendency seems to lurk in

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some families. Several members of the same family may be affected; parents and offspring, brothers, sisters, cousins.

The cause of glioma retinae is unknown. Wintersteiner, in his exhaustive research, concluded that the tumors were the result of misplaced cells of the outer layers of the retina. Trauma and inflammatory attacks have been held as pre-disposing causes, but such is hardly possible.

Glioma retinae passes through three stages; (1) the period of intra-ocular growth; (2) secondary glaucoma; (3) extension to surrounding tissues with metastases to distant viscera.

The period of intra-ocular growth is devoid of symptoms, except the loss of vision, which may be noticed by the parents; and a peculiar reflex from the pupil (amaurotic cat's eye—Beer). The retina may become detached during this period and found that way should the patient be brought to the surgeon.

The second stage (glaucomatous) of the disease is usually of sudden onset. It is at this time that most of the patients are brought to the surgeon. There is present all of the symptoms of glaucoma; namely, increased intra-ocular tension; congestion of the pericorneal blood vessels; pain in and about the eye; edema of the cornea; with reduced or lost vision. When the ocular fundus can be seen the tumor will be found. In an occasional patient we will find a hazy aqueous humor, or deposit of cells in the lower part of the anterior chamber (hypopyon). The other eye should be subjected to a thorough search for tumor masses.

Unless the globe is removed early, gross changes will take place due to the increased intra-ocular pressure and necrosis of the tumor. There will be atrophy of the choroid, ciliary body, and iris, with hemorrhages and thrombosis of the intra-ocular blood vessels. Stretching of the cornea and sclera will occur in time unless the eyeball is perforated. It is now generally agreed that the reverse process, shrinkage of the eyeball, does not occur until the globe has been perforated by the tumor. Phthisis bulbi should always be sectioned and examined for intra-ocular neoplasms. When these are found, they are usually melanotic sarcomata.

Before all of these changes take place the condition invariably has passed into the third and last stage; that of direct extension to the adjacent tissue with metastases. Whenever we find the tumor has invaded orbital structures it is a certainty that distant viscera are also invaded.

Perforation often occurs at the limbus first; next, about the venae vorticosae, and last around the optic nerve. Metastases occur by direct extension along the optic nerve to the orbital tissue and brain; through the lymphatic system and blood stream to distant viscera.

Glioma retinae is a soft, yellowish or bluish white tumor, not pigmented; but it soon becomes gray or white from fatty degeneration and focal

calcification. The cut surface presents many red spots due to engorged blood vessels or hemorrhages, as the tumors are especially subject to necrosis. Several neoplastic nodules are present in the retina, which later become confluent. When the neoplasm occurs principally on the outer surface of a detached retina it is known as glioma exophytum, or tuberosum. Should the retina be thickened diffusely and detached, it is glioma difussum or planum.

When the neoplasm does not cause detachment of the retina, but extends into the vitreous body, we have glioma endophytum. The origin may be from any area of the retina, but is chiefly from the posterior pole, and arises from the nuclear layers.

The tumor is composed of small cells in a soft basement-substance. The cells have the peculiar property of maintaining growth when detached from the parent mass, so a cell in the vitreous body may act as nidus of an independent growth, providing nourishment is sufficient.

The cells are collected in tubular formation about the larger vessels and each tubule constitutes a blood channel without endothelium. The inner cells proliferate rapidly, the older ones being crowded from the blood channel, until they receive insufficient nourishment, and disintegrate. This explains why so many poorly staining cells are found between the tubules.

When a tubule is seen on cross-section we find long narrow cells with large oval nuclei in a circular arrangement about a lumen. This is called a rosette (Wintersteiner), or "ears of maize" formation (Knapp). Such a cell formation has not been found in any other tissue except glioma of the retina, or in the retina of undeveloped eyes. The tips of the cells within the lumen unite to form a thin basement membrane.

The rosettes never form long tubules, are frequently absent, or are found in parts of the tumor only, and then in the earlier rather than the later stages. Rosettes are thought to arise from the rod and cone layer of the retina. The nearer the origin to the optic nerve the more frequent rosettes are supposed to occur. The thin membrane forming the inner border of the rosette has been interpreted as being the remains of the *membrane limitans externa*.

The conditions to be differentiated from glioma of the retina are:

1. Simple detachment of the retina. This rarely occurs in childhood. When detachment without tumor formation occurs, the retina is a gray or bluish tint, devoid of the formation of new blood vessels, and the surface is irregularly displaced in the vitreous. The tension will be normal or reduced. If the globe is enucleated section of the globe will decide the question.

DeSchweinitz and Shumway gave detachment of the retina with dropsical degeneration of the rods and cones as resembling glioma.

1. Tumors of the Choroid. A flat detachment of the retina suggests tumor of the choroid, but the surgeon will scarcely ever be able to differentiate between sarcoma and glioma in a child until histological study is made. The primary tumors of the choroid are leuco-sarcoma (white), and melano-sarcoma (black).

3. Pseudo-gliomata. By this term is meant masses in the interior of the eye resembling glioma but not of neoplastic origin. They are the ones most frequently causing error. Whenever in doubt, the eye should be enucleated.

Acute and chronic suppurative hyalitis would head this group. Acute suppurative hyalitis has the history of recent injury, the acute inflammatory symptoms, with brief course until there is a show of pus. Chronic suppurative hyalitis follows the acute infectious diseases. There are no new vessels on the surface of the mass, and the latter is smooth instead of nodular. Histological study will show necrotic cells making up the vitreous body with inflammatory findings throughout the remainder of the globe.

4. Wintersteiner mentions cysticercus to be differentiated from glioma. This condition is rare in America, frequent in Australia and New Zealand, a bluish white mass in the interior of the eye, without blood vessels, normal tension, vision reduced or destroyed and inflammatory symptoms. The cysticercus can often be seen with the ophthalmoscope.

In presenting these cases to the society, I am sorry to admit that the records of some of the older and most interesting cases have been lost and for that reason they must of necessity be omitted in this report.

The first of these cases is one seen by Dr. Hughes twenty years ago. The remaining six cases have all been seen by me before enucleation was performed. No cases seen in consultation are included in this report.

Mary M., age three years, was seen by Dr. Hughes September 12, 1908. The mother gave a history that for a month or more she had noticed a peculiar look out of the child's left eye. There was no redness or pain but the mother thought the vision of the left eye was poor because the child always used the right eye to look at objects closely.

A diagnosis of glioma of the retina was made and enucleation of the left eye advised.

On the second day following, the left eye was removed. This girl made an uneventful recovery and was sent home from the hospital on the fifth day.

This case reported to our office seven years ago with an acute conjunctivitis of the right eye. There was a normal left eye socket in which an artificial eye was worn.

She is now married and has two children, neither of whom have shown any symptoms of glioma of the retina. You will see by the record it was

twenty years last September since the left eye was removed.

Helen S., age six years, was first noticed to have a blood shot eye in the summer of 1924. This disappeared and again reappeared in two months.

On October 17, 1924, this child was brought to our office with an indefinite history of having lost the sight of the left eye. There was so much haziness in the lens that it was impossible to see the fundus definitely, although a definite detachment of the retina could be made out. As definite a record of this detachment was made as we could get in order to determine if possible if any extension would take place.

In the winter of 1924-25 a definite cataract developed until it was impossible to get more than a fundus reflex with the ophthalmoscope. Because we had suspected this was a tumor case we had kept a record of the tension. At first there was no difference in the two eyes. In the early spring the tension of the left eye began gradually to increase. When seen on March 11, 1925, she had tension O. D. 32 and O. S. 48, McLeans tonometer. There had never been any pain in the eye. The eye was blind before a cataract developed. There was a definite detachment of the retina seen before the cataract developed.

With these points all in mind we advised enucleation and this was done March 12, 1925. As this child was from out of town, she was kept in the hospital for seven days and the socket was entirely healed when she went home on March 19, 1925.

Pathological report of Dr. Moon in this case was a glioma of the retina.

I have seen this case since this report was written and she is in perfect health, weighs eighty pounds and has been entirely well since her operation.

Robert H., age three, reported August 2, 1925. The history was that he had had the whooping cough the latter part of June. His right eye became inflamed and stayed that way for nearly a week, and then cleared up. He was taken to the family doctor who at that time observed nothing wrong with the eye except a slight sub-conjunctival hemorrhage.

On the evening of August 1, 1925, the parents noticed the child had a peculiar look out of his right eye and came to the office next day. At that time there was the typical reflex of the glioma, the amaurotic cat's eye. I was sure it was a glioma and advised removal of the globe at once.

On August 3, 1925, the right eye ball was removed and the patient left the hospital on the fourth day in good condition.

The pathological report in this case was a glioma of the retina.

This case has been seen at intervals of one to three months since the operation two and one-half years ago. There has been nothing abnormal

noted. Because of the irritation from an artificial eye, I have advised against wearing one until he starts to school this fall.

Wilma S., age seven months. Seen by local physician December 20, 1926. History at that time of eye ball beginning to enlarge six weeks ago. Diagnosis, sarcoma or glioma of retina. Admitted to Riley Hospital, December 21, 1926.

History: A seven months old baby, full term, normal delivery. When born baby had a bluish discoloration of the right eye which was observed to be slightly larger than the left. At six weeks of age the lid became swollen. This subsided but in three weeks the swelling recurred. The eye ball began to noticeably enlarge at three months and grew slowly until one week ago, (at seven months) when it began to swell rapidly and is now very large and protruding. The eye began to bleed yesterday. Six weeks ago the ears caused the child to scream with pain and rub them. Both drums ruptured soon after and have been draining a sero sanguinous fluid since,

Sores on the head appeared three weeks ago as yellow blisters. Exuded pus when they broke down and were cured by lead salve. No history of cancer in the family. No contagious diseases.

PHYSICAL EXAMINATION

A white female infant, age seven months, weight seventeen pounds, well nourished and healthy appearing body. Mouth and nose negative. Eyes, a large tumor of the right eye showing an enlarged pupil. The remains of the cornea is grayish in the center and red and hemorrhagic around the side of the tumor. Tumor is the size of a walnut. Left eye appears normal. Both ear drums are lacerated and discharging pus.

December 22, 1926—Patient's condition same.

December 23, 1926—Right eye enucleated and packed in dry gauze. Temperature 106 at 12 noon.

On the morning of the 24th, condition was much worse. There was twitching of the entire body. Signs of general failure. Face and arms blue. Oxygen inhalation. Patient died at noon December 24, 1927. Temp. 107.4.

Laboratory findings—Blood count December 23. 8 A. M., R. B. C. 4,600, whites 15,600. December 23, 4 P.M. white 19,300. Clotting good. Post mortem examination.

Gross Description: A semispherical mass of tissue enclosed in a firm capsule, about $2\frac{1}{2}$ cm. in diameter. The tissue contained within the capsule is a mixture of homogeneous tumor-like tissue, chocolate colored friable tissue and some looser granular substance. There is also an irregular piece of soft tissue resembling the tumor tissue. Section. Ramsey.

Microsection: Around one side of the section a definite fibrous capsule is apparent. However, some of the cells which occupy the concavity of this margin of connective tissue are to be found penetrating this capsule and lying in groups

along its outer edge. The tissue within the capsule is made up of large round and polyhedral cells of great variety in size and shape. The nuclei are large and hyperchromatic. Many cells are multi-nuclear. This cellular tissue is trabeculated by strands of fibrous tissue. In some of these bands are large cells bearing granules of melanin. The more cellular tissue shows considerable intercellular fibril formation. The blood vessels have exceedingly delicate walls. There are large areas of necrosis.

Diagnosis: Round cell sarcoma. Melanotic sarcoma. Glioma.

Note: This is not the ordinary melanotic carcinoma arising from a pigmented naevus. Its structure is more of a neoplasm of mesoblastic origin. The presence of pigment in a tumor of the orbit suggests its derivation from elements normally developing into a choroid. There can be no question as to the great malignancy of the lesion.

Junior P., boy, left eye, seen first January, 1927. Diagnosis: Glioma of retina. Advised operation at once. The parents thought our methods too radical. They went to a chiropractor who gave the child forty treatments at \$2.00 each and promised an absolute cure. This took twenty weeks of valuable time.

On June 6, 1927, patient reappeared at our office, this time with the eye congested, sensitive to light and in constant pain. The symptoms were due to the enlargement of the tumor and the increase of tension. The tension at this time was very high and the eye ball itself showed signs of rupture at the cornea scleral margin. Enucleation was again advised and was done the same day at the hospital.

The wound healed promptly and the patient returned home on the fourth day. On June 14, 1927, the eye socket was entirely healed and the patient was dismissed with the instruction to return if any symptoms appeared. The patient was next seen on September 11, 1927. At that time his general condition was poor and there had been considerable loss of weight. On October, 1927, the patient died from exhaustion. I have been unable to get a good history of this case following the last date seen by us which was September 11, 1927. It would be interesting to know in detail of the final illness which took his life.

Ottis C., male child, age two and one-half years, came to this office, complaining of a bad left eye, a crippled right side and poor breathing.

The bad eye had been present since birth and has been growing worse the past month. There is a partial paralysis of the right side which seemed to be since birth as the mother noticed the child used the right side less than the left.

Examination showed the typical glioma reflex of the left pupil. The pupil does not react to light or accommodation. The yellow reflex is most marked on the nasal side of the eye.

With ophthalmoscope it was impossible to see the nerve head. The tumor was so large it appeared to almost completely fill the globe.

On December 17, 1927, I removed this eye with about one-fourth inch of the optic nerve behind the globe. This case was again seen and there was some bulging behind the conjuction suggesting a recurrence of the neoplasm. This is one of those cases which was well advanced. The prognosis is indeed doubtful, probably bad.

Charlotte D., age three, was first examined in November, 1927. The history was that the eye was normal until it was hit by a sucker stick in June, 1927. The mother describes an irritation after this accident lasting for two weeks or more. After this subsided there was no trouble noticed until the first week in November, 1927, when the mother noticed the peculiar appearance of the eye. On examination the findings were typical of glioma as described before.

The eye was enucleated on December 2, 1927. After five days in the hospital the child made a good recovery. This case was last seen on August 14, 1928. At that time there was no evidence of any trouble.

CONCLUSIONS

Of the seven cases reported, the first has beyond any doubt passed the period of danger (four years) following enulceation for this condition.

Helen S. and Bobbie H., two cases in 1925, seem to be in a fair way for complete recovery without recurrence.

Of the two cases which died, the small seven month's old baby had a very malignant, rapidly growing tumor which was likely there before birth, judging by the history. The other child which died is clearly a case of neglect.

The last two cases reported were operated too recently to form any opinion in regard to the final outcome.

Finally, glioma of the retina seems to be fairly amenable to treatment if an early diagnosis and removal of the eye is performed.

On the other hand, death seems the only result in those cases in which removal of the eye ball is postponed until there is definite pressure and pain symptoms.

DISCUSSION

W. F. HUGHES, M.D. (Indianapolis): I would like to mention one other case. The books usually speak of extension of the brain—meningitis. I have seen only one case of that kind, a boy of five years who had a true glioma. The temperature was rising when I saw him. The eye was enucleated and healed promptly, but six weeks afterwards the child died of meningitis. I did not see him, but that was the diagnosis made.

C. P. CLARK, M.D. (Indianapolis): There is no subject that interests the ophthalmologist more than that of intraocular tumors; and there is no other subject that is more important to the patient

not only because of the loss of the eye and of vision, but the life of the patient in some cases. As long as the patient has an eye and we are reasonably sure that a tumor is present, we enucleate the eye immediately. After the eye is enucleated the diagnosis can be readily made by the presence or absence of pigment. If there is not pigment you have a glioma; if there is pigment you have a sarcoma.

There is nothing that gives one a sinking feeling more than a patient with intraocular tumor, particularly if it is the second eye involved. I have never seen bilateral intraocular tumor in private practice, but in dispensary practice I had a colored child about five years old who had bilateral intraocular tumors. One eye had been enucleated, but the remaining tumor involved the orbit and extended to adjacent tissues, to the long bones of the skull and to the meninges. Of course the child died. Section was done and it was found to be a sarcoma.

While I was a student at the Wills Eye Hospital Dr. Burton Chance had a patient, a child about three years old. One eye had been enucleated that spring by Dr. Chance because of glioma. The other eye looked rather suspicious, but he decided to wait a little while. The parents of the child would not listen to enucleation of both eyes at that time. Within six months the child was back with definite intraocular tumor. After a time the parents consented to enucleation, but the child died. On thinking the thing over I am not so sure but that the parents were right to refuse enucleation. It is a terrible thing to have a child go through life with both eyes gone. I believe if x-ray or radium, or anything else was available I would try that.

I saw another patient there with bilateral tumor which extended into the orbit and terminated the case.

X-ray and radium have not been given a fair trial in these cases. Some men have reported a certain amount of enthusiasm, but it has not amounted to much. If a tumor has not entered the globe, and it is a unilateral affair, of course enucleation will settle it. Where the second eye is later involved, I am rather of the opinion if it were myself I would want to try x-ray and radium and everything else rather than enucleation. That is averse to the general teaching, but I am looking at it from the standpoint of the parents, and what the patient has to look forward to in life.

C. J. ADAMS, M.D. (Kokomo): I think the doctor is to be congratulated on the fact that he had so many successes.

I have had a few cases. In 1920 I had three, two in one family, with a history of tuberculosis and syphilis on the mother's side. In the other case the parents were apparently normal. When I was in Vienna in 1923 I asked Dr. Fuchs about his success in these cases and he said he had had

pretty fair success, that he had been able to save a good many cases. His idea was to take out the eye early, if you could make a diagnosis, and take out as much of the optic nerve as possible.

These cases are interesting in more ways than one. I remember one case that was a bilateral affair that was not operated on. The tumor progressed in the right eye and was stationary in the left eye—did not progress beyond a very small tumor mass. But the tumor in the right eye evidently caused the death of the child.

O. T. ALLEN, M.D. (Terre Haute): As resident surgeon of the Illinois Charitable Eye and Ear Infirmary I saw several of these cases. The first case I saw in private practice (I have seen two) was about four or five years ago when I was doing general practice. This was a boy about four years of age, living with his parents in Terre Haute. The child was not taken to a physician in Terre Haute, but after tension had developed and the eye was protruding so the lids would not close, he was brought to me and I referred him to an eye man, but it was weeks before they would consent to enucleation. When the eye was removed the pathologist's report was gliosarcoma. I did not know much about the eye at that time and did not use the ophthalmoscope, so I cannot tell you the condition of the eye, but in a couple of weeks the child was brought in with a tumor in the other eye. I felt the case was hopeless and told them so, and they went to a Christian Scientist. About two months after that someone told them they would have to have a coroner's inquest in case of the child's death unless they had a doctor, so they called me. The child was in a comatose state, and there was a mass as large as my fist lying on the pillow in front of the eye. The child died a few hours after that and I reported the case as gliosarcoma.

About three weeks ago I was consulted by a woman forty-two years of age who had been losing vision in the right eye for about a year, and I noticed that the nasal side of the field was cut off. The vision was 20/300, and there was a small, smooth white growth on the temporal side just back of the ciliary body. There was no tension and I thought the loss of vision was due to the fact that the tumor protruded over the macular area. I could not see the macular area of the fundus, but the rest of the fundus seemed normal. This tumor occupied about one-eighth of the space in the globe. It did not have the appearance of a detached retina. I used transillumination, and felt sure it was not detached retina. I made a tentative diagnosis of leuco-sarcoma. The eye was removed two days after I saw the patient the first time, and the pathologist's report was gliosarcoma. I had the impression it did not occur at that age.

Now I would like to know what the men think about putting an artificial eye in this socket. I have not done so and I wonder whether it would be best.

B. J. LARKIN, M.D. (Indianapolis): Dr. Egan and I have had several cases of glioma retinae which we have referred back and forth to each other. In one case I removed the girl's eye and to date there has been no recurrence. The youngest child I have seen with glioma was six months old. I saw that case in consultation. One of my confreres removed the eye, and the report from the family physician is that the child is getting along fine, except for a change in disposition—that she is downright mean. Do you think that would have anything to do with it?

As to recurrence, in our service at the City Hospital we had a colored child come in and we made a diagnosis of glioma of the retina and recommended operation. It was in Dr. Row's service and he enucleated the eye and took out a piece of the skin and the child got along very well for awhile. One day the mother came to the office complaining that the child was very sick, and we recommended the use of radium. It was used, but the child passed away.

The question confronting us in making the diagnosis in these cases is whether we have a metastatic choroiditis or a glioma. In one of these cases in which Dr. Egan was interested I was not sure which it was, so I recommended that they confer with another man and they went to Dr. Row. He said it was a metastatic choroiditis, so I did not remove the eye.

The only case of bilateral glioma of the retina that I have seen was when I was a student, a case presented to the class one day of double glioma in a child a few months old. The question of whether both eyes should be enucleated was discussed, but I do not recall what they finally decided to do.

I cannot answer the question in regard to the use of an artificial eye in these children; I have not had sufficient experience. But I think by all means the child should have an artificial eye when it starts to school. These children are handicapped by the loss of the eye because of the unsightly appearance which will cause comment by their schoolmates.

W. F. HUGHES, M.D.: In regard to the artificial eye, it has been my habit to keep the patient away from an artificial eye for at least two years if possible. I do not know just why I have done that, but I have always thought that the probability of recurrence would be increased by the constant irritation which is always present when an artificial eye is used. It is a practice of mine to have a section made of the end of the nerve when I have a specimen examined, and of course if I know the condition is present in the nerve at the point of section I feel confident that the condition will recur.

ABDOMINAL TRAUMA WITH INTESTINAL INJURY

WILLIAM DEP. INLOW, M.D.
SHELBYVILLE

Every general practitioner of medicine sooner or later is called to attend people who have suffered abdominal injury. He is accustomed to send to the hospital at once cases of gunshot and stab wounds. It is in cases of abdominal trauma where there are few external evidences of violence that his judgment is taxed as to the proper line of procedure: those who have had blows, or horse kicks; who have fallen from a height; who have been caught between objects; who have been run over by vehicles; in short, those who have suffered injury from blunt force. He is familiar with the possibilities of rupture of the spleen or liver, kidney or bladder; he is alert to the symptoms of profuse internal hemorrhage; he can see gross blood in the urine, voided or catheterized. But what of those cases in which the degree of force has been problematical, and the point of injury not over liver, spleen, or pelvis, but in the free abdomen; in which after the initial symptoms of shock have subsided the patient seems in good condition and has only a little abdominal tenderness and rigidity? Does there exist some serious lesion of the gastro-intestinal tract or merely a contusion of the abdominal parietes? Shall the patient be treated expectantly at home, or shall he be sent to the hospital at once and a surgeon called?

Pathogenesis—Trauma to the abdomen with intestinal injury may be local or general, the result of direct or of indirect violence. The intestine may be ruptured or merely contused. Three different modes of rupture are recognized: (1) the intestine may be crushed (*Ecrasement*, *Zerquetschung*); (2) the intestine may be torn (*Dechirure*, *Abriss durch Zug*); (3) the intestine may burst because of pressure within its lumen (*Eclatement*, *Berstungs-rupture*).

In the case of crushing or contusion a portion of the intestinal tract is caught between the object impinging on the abdominal wall and an opposing bony structure, generally the spinal column. This is a frequent type of injury. Perforations may occur at the time, or may be secondary to necrosis in the contused area. The mechanism of this secondary type of perforation merits consideration. The contused area is partially devitalized by the injury and almost always surrounded by a marked extravasation of blood in the intestinal wall. The involved area becomes parietic and when the intestine is called upon to do work, such as occurs when the patient is fed, acts as a point of obstruction. This leads to intestinal distention and meteorism. Distention of the intestine increases its diameter. Any increase in its diameter is tripled in its circumferential measurement. A moderate increase in diameter, there-

fore, results in considerable stretching of the wall. The blood vessels are elastic and the stretching of the intestinal wall from distention thins the vessel walls and narrows their lumina. Thus the contused area is markedly diminished in its blood supply and goes on to necrosis and perforation, the perforation being opposite the mesenteric attachments.

In the case of tearing, traction is made on the intestine. "If the pull is exerted in the cross axis of the intestine and against the root of the mesentery, the mesentery will be torn first and the intestine may or may not suffer. However, if the traction pulls on the intestine in the direction of its long axis, then the bowel itself will tear at the start, and the mesentery may be involved only when the tear is complete. It is evident that the kind of force that exerts traction must be a reasonably violent one, and that it must act on the abdomen at a tangent. It must be capable of compressing the abdominal wall enough to secure a purchase on the intestinal coil, and its further action must exert a strong pull on the intestine. A highway accident in which the automobile wheel grinds the trunk is a splendid example of this variety of generalized violence, while the violent kick of a horse which strikes the abdomen obliquely illustrates tangential local trauma. Tearing is most likely to occur at points where the intestine is naturally fixed, such as the duodeno-jejunal junction or where it is unnaturally fixed, as by adhesions."²⁰

In the case of explosive or bursting rupture there has been much difference of opinion in regard to the mechanism involved. It formerly was thought that by compression from without the adominal space was reduced in volume and rupture occurred from this pressure as when a rubber balloon is made to burst with the hands. A little reflection in physics, however, shows that this does not occur. There must be certain prerequisites for this type of injury; there must be marked filling of the intestine and closure of the intestinal loops on each side, either through knuckling at two points, or through knuckling at one point and closure by the trauma at another point, or through the trauma striking simultaneously at two points. Since these conditions are seldom met, this type of injury is clinically rare.

In the experimental production of traumatic lesions of the intestine contusion damages the mucosa the most and the peritoneum the least. When a loop of intestine is blown up with air, you get tears first in the serosa, then in the mucosa, and lastly, in the submucosa which is quite resistant due to its elastic fibers. All tears go in the long axis of the bowel. In the anaesthetized dog, with the legs drawn down and taut, blows with a hammer do not produce rupture; with the legs up and lax, thus releasing the tension of the abdominal muscles, rupture is produced only when the blow is over the spinal

column, blows to the side of it being innocuous. This emphasizes the protective power of the abdominal muscles if contracted, and the necessity for a background of bone for ruptures by contusion.

Symptoms—The symptoms of intestinal injury are not distinctive. If the force causing the trauma is general and extensive, solid viscera may also be injured and the signs of internal hemorrhage complicate the picture. However, we may conveniently group the symptoms into three stages: (1) that of shock-pallor, sweating, thirst, subnormal temperature, faintness, rapid and weak pulse—with evidence of local injury; (2) that of recovery from shock, in which the pulse and temperature may be normal and general symptoms absent even in the presence of severe visceral lesions; (3) that of the onset of complications; in the case of primary rupture of the intestine the findings of generalized peritonitis are not long delayed; in the case of contusion with secondary perforation, the third stage may be delayed from ten days to two weeks after injury, or even longer.

Shock may be profound or almost absent. If profound the injury almost certainly has been of an extensive nature, with other organs and much tissue involved, and the patient may never rally. On the other hand, with injury limited to a small area the gravest intestinal lesions can exist with a surprisingly slight amount of shock. Hence, shock cannot be taken as an index to the degree of local intestinal injury.

Abdominal pain is an important symptom. We are familiar with the characteristic perforation pain seen in cases of inflammatory perforation such as occurs in cases of gastric ulcer, where the patient can often tell to the minute the time perforation occurs. This type of pain almost always fails in traumatic rupture. This is due probably to the fact that the pain is not so readily perceived on account of psychic excitement associated with the accident; furthermore, the non-inflamed peritoneum is not so sensitive, and pain in the abdominal parietes may be so marked that attention is distracted from inside the abdomen. The patient makes his pain more bearable by contracting his abdominal muscles.

Vomiting is not a reliable symptom. It has little significance when occurring immediately after injury. With simple intestinal contusion vomiting generally ceases, with perforation it continues. However, when vomiting first comes some time after injury it is quite important and is an indication of serious trouble. Bile in the vomitus signifies paralysis of the pylorus and according to Hertle speaks for intestinal injury. Absence of vomiting does not rule out perforation.

The pulse rate is very important. A steadily rising rate after the end of the initial stage of shock is an omen of serious import. Yet the pulse rate in the second stage may be normal even in

the presence of intestinal perforation. The temperature is of little consequence, and should be largely disregarded. It is often normal in cases of injury to the intestinal tract, and very high following a little hemorrhage. In intestinal injuries the patient in his breathing tries to protect his abdominal wall; hence his respiration is costal in type.

Tenderness and rigidity are very important, especially if localized, and constitute our most reliable findings. They appear frequently at the time of injury and do not wait for the onset of peritonitis. However, it is true they are present in some cases where severe visceral injury is absent, but where the abdominal wall alone has been severely contused. A rectal examination should be made, for in cases of perforation the pelvic peritoneum will be found very sensitive.

Abdominal distention as a rule is absent until the third stage, the stage of peritonitis. Occasionally, however, one does see so-called primary meteorism. This rather speaks against a severe lesion and is probably due to direct injury to the retroperitoneal nerve plexuses with resultant paresis of the intestine.

Diagnosis—Thus it is seen that there are no absolute diagnostic criteria of injury to the intestinal tract. We should remember, however, that almost every sort of abdominal trauma may be associated with damage to the intestine, and that extensive and fatal visceral ruptures may be produced by comparatively slight contusions. Yet on the whole the history of the case can give some idea of the extent of injury: the mass of the striking body and its speed; the mass of the human body and its speed; the area to which the force was applied, whether limited or broad; the condition of the abdominal wall when struck, whether tense or relaxed; the period of digestion, whether the intestines were full or empty; the presence or absence of peritoneal adhesions which markedly predispose to intestinal injury; the degree of protection offered the blow by ribs, pelvis, or spinal column; finally, the localization of the point of impact by abrasions on the skin.

In general we may say that the patient who has pain, in whom the pulse rate steadily increases, in whom the abdomen is tender and rigid, especially over a limited area, has in all probability an intestinal rupture.

Prognosis—The prognosis in intestinal injury is grave. Prompt surgical intervention alone offers any hope in the case of primary perforation. Secondary perforation probably often can be avoided by careful observation and a proper dietary regimen. The longer operation is delayed after perforating injury, the less the chance of recovery. Berry cites only twenty-six recoveries in 114 operations in London hospitals. Demel gives a mortality of 97.5 percent in unoperated cases, those not dying forming abscesses and faecal fistulae; in cases operated on within twelve hours.

46 percent recovered; in those operated on within twenty-four hours, 21 percent recovered.

Treatment—Decision in regard to the proper treatment of these injuries is often difficult. Shock, if present, should be promptly combated. The abdomen should be put at rest, preferably by a binder. The giving of morphine, so frequently employed, should be avoided. Its use not only masks the progress of the case, but also probably relaxes the spasm of the intestine existing in the neighborhood of injury, and this facilitates the leakage of intestinal contents. Except in those instances of very minor injury where the physician keeps the patient under close observation and feels that visceral damage is highly improbable, all cases should be sent to the hospital at once. It is the opinion of surgeons best able to judge, "that an exploratory laparotomy should be performed in every case of blunt trauma in which it is not possible to exclude the existence of an injury to hollow abdominal viscera. The only deterrent to an operation under these circumstances would be the fact that the patient is so nearly moribund or in such shock that the operation in itself would be fatal. Certainly absence of the signs of abdominal distress, shortly after the injury, would in no way contra-indicate surgical interference, for, as has been seen, such lack does not guarantee the absence of a dangerous abdominal lesion."²⁰ It is surely wiser to do unnecessarily an occasional exploratory celiotomy with its minimal danger than to run the risk of needlessly overlooking serious visceral lesions which would cost the patient his life.

At operation one can often go directly to the injured portion of the intestine by following carefully the type of injury sustained and the direction of the force. The small intestine even when the seat of very active peristalsis changes its location in the abdomen very little. Spilled intestinal contents should be mopped out with dry sponges and all irrigation avoided. Spastic contraction of the intestinal musculature will generally be found in the region of the injury. This may delay for hours the spilling of intestinal contents into the peritoneal cavity. It may exist even in cases of extensive tearing and complete division of the intestine, as, for example, in the typical tearing loose at the duodeno-jejunal juncture. Intestinal resection may be necessary, especially in tears of the mesentery where subsequent intestinal necrosis would result, but should be avoided whenever it is possible to close a rupture by simple suture. Areas of intestinal contusion that seem viable should be covered with omentum or sutured to the anterior parietal peritoneum.

The treatment of secondary perforation of the intestine should be prophylactic rather than curative, for operation after perforation is seldom of

any avail. Prodromal symptoms are generally present, warning one of the imminence of such an occurrence; these are pain and vomiting, diarrhoea, possibly with blood in the stool, meteorism, and localized abdominal tenderness. The patient should immediately be taken off nourishment by mouth and given fluids either by rectum or subcutaneously. The meteorism should be relieved as promptly as possible by enemata. Turpentine stupes may be applied to the abdomen. If the patient does not promptly improve the abdomen should be opened. In every instance, whether operated upon or not, the patient should be kept under surveillance in the hospital until all danger of secondary perforation has passed.

Summary—In the patient who has sustained abdominal trauma from blunt force, the possibility of intestinal injury should be entertained. If there is suspicion of such injury the patient should be sent to the hospital for observation and treatment. If one is to err, it is wiser to do an unnecessary exploratory laparotomy than to trust to luck and lose the patient from an untreated perforation.

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SOME MEDICAL ECONOMIC FUNDAMENTALS*

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Medicine is divided into three parts—science, art and economics. The science of medicine corresponds to the foundation of a building, the art to the main structure, and the economics to the roof. An architectural structure consisting of a fine building and an excellent roof will not endure long unless the foundation upon which it rests is sound and secure, and one with a splendid foundation and an excellent building will deteriorate rapidly if the roof is defective.

For centuries medicine was submerged in superstition. Then came the age of empiricism when experience raised the first structure of the art of medicine, a structure which has gradually become more and more perfect. Today we have well established scientific facts forming a sound foundation for the art, but the stability of medicine and its future progress are seriously jeopardized because the economics of medicine have been sadly neglected. Medicine today is a structure with a leaky roof.

What medicine needs among other things is a Charles Darwin or an Alexander Von Humboldt to separate the non-essential from the essential scientific facts already discovered and then organize, classify, and correlate the important facts, thus making them available to the rank and file of the medical profession. A multitude of scientific facts have been discovered, many of them of no practical value in the active practice of medicine and even the important ones not available to the average practitioner because they are covered up by much irrelevant scientific data.

The art of medicine has reached a degree of perfection scarcely dreamed of a century ago, but what it needs is a Joseph Price or an A. J. Ochsner in each one of the specialties to again simplify its procedures. Both of these surgeons possessed the ability to an unusual degree of going straight to the heart of their surgical problems.

Some twenty years ago I spent a week with Dr. Price in his clinic in Philadelphia and saw him do a considerable number of abdominal operations, his chosen specialty. One operation I have never forgotten. It was the removal of a solitary gall stone from a gall bladder. His operating equipment was of the most meagre, the operating table consisting of two saw horses and an ironing board. His assistants were one surgical assistant, one anesthetist, one surgical nurse, and one assistant nurse. His instruments consisted of one scalpel, one hemostat and one surgical needle. He removed the gall stone, closed the gall blad-

der and then with the same needle the abdominal wall. While it has been my privilege to see many of the greatest surgeons of the past four decades operate, this was technically the most perfect operation I have ever witnessed. I wonder how many of our present day ultra specialists could do any major operation even moderately satisfactorily with so little equipment.

Some of you may reasonably ask the question—what have these observations on the science and the art of medicine to do with the problem under discussion? Superficially considered—nothing, but critically examined—much. For short periods of time other factors may be operative, but in the long run the economic status of the medical profession depends upon the service it renders to society. If its service degenerates, the financial reward will ultimately decrease, and conversely, if its legitimate financial rewards are unduly curtailed, its service to society will deteriorate. The two are interdependent—neither can truly prosper alone; hence the imperative need of the symmetrical development of all of the three basic divisions of medicine.

The purpose of the study of economics is to safeguard and promote the material resources of a nation or a group within a nation. The study of medical economics has for its primary object the safeguarding and promoting of the material welfare of the medical profession and for its secondary object the promoting of the general welfare of all the people.

For over twenty years, in season and out, I have advocated the need of instruction to all senior students of our medical colleges on the problems of medical economics and this for two reasons—first, in order that they may serve society better, and—second, in order that they may themselves prosper economically. Such a course of instruction, in order to serve its purpose, must fulfill both of these requirements. Dr. Donham of the Harvard Graduate School of Business Administration expressed the purpose of that school in the following terms: "The school is attempting to teach men to work out their own business relations in ways which contribute to social progress." Medical students need such a course of instruction much more than do business executives.

My attention was first called to this problem some thirty-five years ago. Forty years ago there graduated from one of the Chicago medical colleges an exceptionally fine and brilliant young man. He took the county examination and took first place far ahead of all of his competitors. His medical teachers, attending men, colleagues, and nurses, all predicted a brilliant future for him. What actually happened was this: He hung up his shingle in his small home town, had but few patients and at the end of a year took down his shingle, took over his father's hardware store and temporarily at least was lost to medicine. If that young man had had a course of instruction in

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the problem of medical economics he would probably have been much happier in life and rendered a much greater service to society. Since then I have observed a considerable number of utter failures. Even many of those who eventually do succeed flounder around for five, ten and even fifteen years, making all sorts of costly elemental mistakes before they finally establish themselves and their practice on a sound economic basis.

When a young man spends twenty years of hard work preparing himself for the practice of medicine and then utterly fails in rendering suitable service to society in his chosen profession or making a decent living, it is a real human tragedy, and when this sort of thing happens to many hundred graduates every year, it is a great economic loss to society and the multiplication of human tragedies. I am firmly convinced that much of this could and should be avoided.

In the January, 1929 number of the *Northwest Medical Bulletin*, there is an article by Dr. Emmet Keating, under the caption—

"Wanted—A John Stuart Mill, Within the Ranks of the Medical Profession."

"With so much confusion in the minds of the medical profession regarding the marketing of medical service, it would be a great help if there were some way to make it possible for a few physicians, with some experience as family doctors, to devote all of their time to a scientific study of the complex problems now facing the medical profession and the public.

"Scientific medicine is so vast a field that its study and practice monopolize all the time of most physicians who are mentally equipped to successfully investigate the subject of economics."

In the main I agree with this statement. But there is an implication with which I do not agree. I do not believe that the problem is a very difficult one. I believe that main phases of the problem could be satisfactorily solved without a great deal of difficulty if we would brush away the non-essentials and get at the heart of the matter. This problem will never be solved by theorists, swivel chair doctors, welfarers, philanthropists or other laymen with only a superficial knowledge of the problems involved in the practice of medicine. It can only be solved by medical men with personal knowledge of all of the phases of medical practice as well as wide experience in life's problems in general.

To me one of the mysteries of life is why each succeeding generation has to make about the same mistakes that every preceding generation has made. On the morning of March 11, 1929, I saw an article in the *Chicago Daily Tribune* stating that the government's venture in attempting to establish a merchant marine had cost three billion dollars in taxes to the citizens of the United States. I am willing to predict now that within fifty years when a new generation has come into the United States the government will again re-

peat fundamentally the same experiment with a similar result. Thirty years ago the general cry went up—"give everybody higher education and the millennium will arrive." Now everybody is getting higher education and the millennium has not yet arrived. Two of the leaders in American education, Dr. John Dewey of New York and Dr. Meikeljohn of the Experimental College of the University of Wisconsin, are just waking up to the fact that mass education after all has many defects. I heard Dr. Meikeljohn say in a very interesting address the other day that they are just beginning to find out that in the scheme of education each student must be dealt with as an individual and not as one of a great crowd. They have rediscovered a fact which all the great educators since the beginning of history have known but which every so often seems to have been forgotten; namely, that the intellectual capacity of the student and the instructor, and their mutual sympathy and understanding is the important thing; that after all the mere acquisition of knowledge does not make men and women better citizens, make living together in society easier, or "assure the durable satisfactions of life". Are we in medicine going to make the same mistake that has been made in education? Are we going to forget that the practice of medicine is a very individual matter which does not lend itself to wholesale methods? If we are, medicine will surely regress instead of progress.

Without going into details, it seems to me that there are certain fundamental facts already known, which, if applied, would solve most of our economic problems, or stated conversely, there are certain practices and tendencies which endanger the future of medicine. The safe navigation of a ship depends in large measure upon the knowledge of the dangers which beset navigation in general. If we would safeguard the future of medicine we must do what the maritime nations do—set up light houses marking the capes, bars, rocks and shoals upon which medicine is likely to be wrecked.

The main dangers to medicine as I see them are—

1. Lack of balance between the main divisions of medicine.
2. Too great specialization with resulting relative over-emphasis on the non-essentials.
3. Petty jealousies within the profession itself.
4. Misinformation of the true purpose of medical charity.
5. Misinformation as to the cost of being sick.
6. Misinformation as to the quality of medical service rendered to the man in moderate circumstances.
7. Misinformation as to qualification of the average medical man.

8. Lay and political domination and control of the practice of medicine.

The first two have already been briefly considered. The third needs a little further elucidation. Its cause, selfishness, is quite if not even more common in society in general and there equally, if not even more, pernicious.

PETTY JEALOUSIES WITHIN THE PROFESSION ITSELF

Occasionally one sees medical men at medical meetings and conferences oppose certain worthy movements for apparently no better reason than that they fear some political opponent or rival might get a little personal glory out of it. I believe that this attitude of mind, this spirit of rivalry is a direct consequence of a faulty method of teaching in our primary and grammar schools. The practice of constantly pitting one child against another instead of getting them to cooperate and help each other is the probable root of this evil. I sometimes wonder whether Lincoln, had he spent much of his childhood in school, would have had the attitude of mind which led him to say that he was willing to travel with anyone, no matter who he was, if he were going in the right direction.

Another source of mischief is the following—A man with vision has a big idea. He nurtures it along just about to the time of fruition and then some one comes along, purloins it and gathers in the fruit of his labors.

These two things do an incalculable amount of harm because one or two such experiences discourages the more sensitive and the less hardy and determined, and thus retards medical progress.

Unselfish cooperation is one of the biggest phrases in the English language, and no group of men needs to realize its importance more than do medical men. Therefore, it is essential that we secure unselfish cooperation between the individual members of the medical profession and with all movements that can be reasonably expected to make life richer and fuller for all men.

MISINFORMATION OF THE TRUE PURPOSE OF MEDICAL CHARITY

The man who once accepts charity, particularly if it is not a case of dire necessity, is not quite as fine a man as he was before. He has lost something that nothing can replace. Many of the innumerable charitable organizations in existence are doing more and have done more to undermine character than can ever be evaluated; consequently, it is a serious question whether or not many of them have not actually done more harm than good.

War, pestilence, general disaster may reduce any one of us to want and penury, and then there is no disgrace in accepting aid from our fellowmen, but under ordinary circumstances we have no moral right to that which we have not honestly earned. In giving we should be very careful to

give only to make men better and not to make them worse. Just now we need in this world a little more pride and a great deal less vanity, more self-reliance, individuality, and independence.

It is far better to be a little hungry, a little cold or even a little sick physically than to have lost one's self-reliance and self-respect and to have become a human parasite. Parasitism is today the corroding canker of American life and nothing has fostered this more than unwise medical charity.

To quote again from Dr. Keating's article—"At the present time studies and experiments in rendering medical service are being made by men outside of the medical profession who are striving for a goal of cheap service or outright charity. Many of these men are giants in the world of business. They are very thoroughly aware of the fact that no business can be successful and continue to exist, unless it is conducted at a profit. They know that cheapness may be profitable when it is the result of quantity production. They know that in many things quantity production is not incompatible with excellent quality. But they do not know that quantity production in medicine is a deadly foe to either excellent or maximum quality."

MISINFORMATION AS TO THE COST OF BEING SICK

The onus of the increased cost of being sick is being placed upon the shoulders of the medical profession most unjustly; instead it should be placed upon the hospitals, and the public in general, where it justly belongs. It is surprising how much misinformation a simple phrase may convey and how much mischief such misinformation can do. We have seen the phrase—"the increased cost of medical care" so often in print in recent years that most people have accepted it as expressing the truth and yet nothing could be farther from the truth. I challenge anyone to produce convincing evidence that the cost of medical care has increased to the same degree as have other necessities of life since the purchasing power of the dollar has decreased. While there may be a few ultra specialistic quasi medical quacks who charge exorbitant fees, it is no more fair to blame the whole medical profession for their wrong doings than it would be to blame reputable bankers and brokers for the actions of those investment brokers who sell worthless stocks and bonds. No formula has ever been devised to keep the fool from squandering his money, and those who choose to go to unscrupulous ultra specialistic exploiters when they could go to honest, more competent members of the profession, have only themselves to blame if in the end they are fleeced. It is an ever recurring surprise to me how many of the extremely rich, particularly the newly rich, are constantly victimized by the "fore-flushers" in medicine. One complaint which I have heard on several occasions is to the effect that the professors of our medical colleges charge their pri-

vate patients exorbitant fees. This abuse, if it is an abuse, must again be laid at the feet of the bungling of laymen who meddle with medical matters without first thoroughly informing themselves. If a professor has to give half of his time without compensation to the charity wards of the hospital connected with the medical college, he must, in order to live, charge his private patients extra for his services. If lay trustees of medical colleges would pay their teaching staffs a living wage, they would have better teachers and if laymen in general would choose their medical advisors on the basis of proven skill, knowledge and honesty in place of professional titles, this practice would soon cease. I know one surgeon in this city who on three different occasions refused a full professorship in surgery in three different medical colleges and he said that he did this for the following reasons: That he could not afford to give his time, energy, skill, and knowledge to the medical college for nothing unless he then overcharged his private patients, a thing which he was not willing to do.

Let those who blame the medical profession for the increased cost of being sick ponder the following facts: Twenty-five years ago the usual price paid for a twenty-four hour special duty nurse was thirty-five (\$35.00) dollars per week. This with the addition of the ordinary floor service available at all times insured adequate nursing care for a patient no matter how ill. Today equally satisfactory nursing service for a seriously sick patient can be secured in most hospitals only by employing a day special and a night special. Each of these in Chicago receive seven dollars for twelve hour duty, and the usual hospital charge for their meals is one dollar and fifty (\$1.50) cents a day, making a total of seventeen (\$17.00) dollars a day or one hundred nineteen (\$119.00) dollars per week. This is an increase of 240 percent or nearly three and one-half times as much as twenty-five years ago for nursing service alone. If some of our philanthropists want to decrease the cost of being sick here is a splendid opportunity for their efforts, and if they do this they will not be continually barking up the wrong tree.

MISINFORMATION AS TO THE QUALITY OF MEDICAL SERVICE RENDERED TO THE MAN IN MODERATE CIRCUMSTANCES

Another common assertion is that the man with a moderate income is not getting adequate medical service. This statement, I believe, is essentially untrue. I believe that the man of moderate income is on the average getting better medical service than the very poor and the very rich. Probably not so much paraphernalia is employed in treatment, nor does he receive so many fancy and unnecessary laboratory tests and examinations, but he is getting the essentials to make him well or keep him well. Why is it that when a man

of moderate circumstances gets seriously ill he usually makes the grade while when a prominent man gets seriously ill he usually passes out? One reason is that the latter usually has too many doctors and too many examinations. I could, if space permitted, cite some very interesting and convincing case histories in this connection.

Show and style and elaborateness do not necessarily indicate efficiency. While there is a minimum in physical equipment below which one can not safely go and be efficient, there is also a maximum beyond which it is unsafe to go because it clutters up things—because it obscures the issue by diverting the attention from the essentials to the non-essentials. The old Swiss proverb—"too little and too much are equally bad" is truly applicable here.

MISINFORMATION AS TO THE QUALIFICATIONS OF THE AVERAGE MEDICAL MAN

Another statement which one often hears is that the average practitioner of medicine is incompetent. This is equally untrue. No other group has rendered a greater service to society, for it has given good health and length of life, two of the greatest blessings man can possess, to an ever increasing number of men and women. Few departments of human knowledge have made the marvelous strides that medicine has in the last fifty years. This would have been impossible if the average practitioner of medicine had been incompetent. It has been my privilege to know rather intimately a great variety of men in all classes of society and all walks of life. I know of no group that averages higher in general intelligence, industry, integrity and efficiency. I have had an opportunity to observe the work of all classes of physicians, literally hundreds of them, and I believe that the general practitioner of medicine, man for man, averages quite as high in these essential qualities of manhood and citizenship as do the specialists.

LAY AND POLITICAL DOMINATION AND CONTROL OF THE PRACTICE OF MEDICINE

This is today the most vital problem of all those considered. After all is said and done, experience is not only the greatest teacher but the most dependable guide. Let us see what lay and political domination and control have accomplished up to the present time. This will give us a fair index as to what we may expect of it in the future and what will happen if the present tendency to lay encroachment is not halted. Let us start with a consideration of our local institutions. Up to the early eighties, the medical care of patients in our county hospital was practically entirely under the control of the faculties of the then two existing medical colleges. One day one of the attending surgeons grafted a piece of chicken skin on a varicose ulcer. Strange as it may seem it healed in position. The patient and his friends made

such a row that the Board of County Commissioners dismissed the surgeon. The remaining members of the attending staff came to his support and threatened to resign unless he was reinstated. He was not reinstated, they resigned and the Commissioners appointed their political friends on the staff. This was the beginning of lay political control of the county hospital.

While the county hospital has always been a wonderful school for the training of medical men, some of the most prominent men of this country having served their internship there, very little of permanent scientific value has come out of the county hospital since the time of the skin grafting episode.

It was my privilege to serve as interne under the late Dr. John B. Murphy for a period of six months. I remember an incident which occurred during my three months' junior service and which in large measure explains why little of scientific value has come out of the county hospital. When Dr. Murphy did difficult operations he brought his own instruments. One morning when some of these were lost, he was very much incensed. He went to the warden and demanded, in language such as only Dr. Murphy was capable of, that the hospital supply suitable instruments. The warden promised everything but the instruments had not yet arrived one year later when I was on Dr. Murphy's senior service. In politically dominated institutions, one of two things invariably happens. Either the competent men are worn out with "red tape" and delay until they give up in despair and leave the service, or political favorites get the key positions. Both are destructive of medical progress. Just one further illustration to show how these things usually work out in the county hospital and why so little of scientific value comes from it. Some forty years ago the staff of the Cook County Hospital decided that the County Commissioners ought to provide a medical statistician in order that medical statistics could be published and back histories could be traced for study and investigation. The first registrar was a thoroughly competent, scientific medical man who held the position only a few years. Then a political doctor was appointed who spent most of his time building political fences and rendered no useful service to the hospital or the community.

What about our state institutions? In the early days some splendid work was done in our schools for the deaf and in the establishment of the cottage plan for the insane at Kankakee. The latter was one of the first institutions of its kind in the world and was the child of the fertile brain of Dr. Richard Dewey, then superintendent at Kankakee. Individuals and committees interested in the care of the insane came from all over the world to inspect and study the physical plant. A short time after Governor Altgeld was inaugurated as governor, he discharged Dr. Dewey, one of the greatest psychiatrists this country has

yet produced, and put in his place a man who was intoxicated most of the time. Little of value has come out of state institutions since Dr. Dewey left. The state has under its care over 20,000 wards and medical service to these wards is rarely excellent or even good, occasionally mediocre and usually deplorable. In our insane asylums a physician is supposed to take care of between three and four hundred patients while no man can efficiently care for more than one hundred and fifty. In our home for the feeble minded and in our penitentiaries the condition is no better, surely a condition of which every citizen of Illinois should be thoroughly ashamed.

The national government has had under its medical care over one percent of its citizens ever since its establishment one hundred and fifty-three years ago. Nothing new in treatment has been developed by the medical staff of the army and navy or the public health service in all this time. Several years ago when I visited a large army post, one of the captains of the service told me that the reason the service was mediocre was because they had to spend so much of their time on paper work, and because often when a man became particularly interested in a problem he might be transferred on a moment's notice without regard to the stage of his investigations, and because advancement was according to seniority and not according to efficient service.

In those European nations where lay domination and political control have become the most pronounced, medical service has steadily degenerated, as is best illustrated by the increase in loss of time from sickness. What then will be the result of universal lay control? There will be uncertainties of tenure of office, best positions filled not by the most efficient but by political favorites, loss of independence to medical men with all its deplorable consequences.

What would the captains of industry say if the medical profession attempted to meddle with their affairs? Frankly, I think the medical profession has solved its problems more nearly and more satisfactorily than the industrialists. Frankly, again, captains of industry had better pay higher wages or take smaller profits rather than acquire great fortunes and use them in pauperizing the public. Let me suggest the application of the Golden Rule in this connection. So far the medical profession has remained strictly neutral in the struggle between capital and labor. Should capital force the medical profession to align itself with labor, it might perchance prepare for itself the same kind of a bed of roses that Commodore Vanderbilt prepared for the railroads by his expression—"the public be damned", or that "Divine Rights" Bear prepared for the coal industries by his idiotic statement that the mine owners control the mines by divine right.

It behooves society in general to ponder well

before it destroys the professional and economic independence of the medical profession.

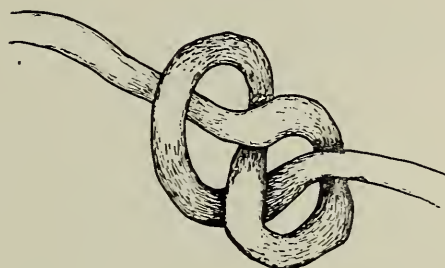
Medicine achieved its greatest triumphs and made its greatest progress during the three decades from 1880 to 1910, during a period when medical men were least hampered by political and lay domination and control. I am thoroughly convinced that unless medicine retrieves its lost ground, and unless medical men again get substantial control of their own affairs, medicine has reached the zenith of its glory and the acme of its usefulness to society.

UNUSUAL KNOT OF THE UMBILICAL CORD

C. O. McCORMICK, M.D.

INDIANAPOLIS

On December 27, 1928, I delivered at the Coleman Hospital with low forceps a primiparous patient thirty-one years of age. The baby, a female, weighing eight pounds and four ounces, was fully developed and unasphyxiated. The cord presented a rather loose figure-of-eight knot, sketched below. There was nothing in the prenatal history revelant to the production of such a condition other than at about seven and one-half month's gestation, the patient, while in syncope, sustained a very severe fall upon a cement floor, landing upon her abdomen. A threatened premature labor ensued, necessitating five day's hospitalization.



ing asphyxia. The constant pulsation of the cord and the consequent turgescence are factors that often prevent tightening to the point of asphyxiation. Instances occur where asphyxia, although not producing death of the fetus, does markedly interfere with its development.

This unpreventable anomaly, knots of the umbilical cord, is one of the several obstetrical complications that will for all time lend to unavoidable infant mortality.

THE REQUIREMENT OF AN INTERN HOSPITAL

Before any hospital can be considered for intern training it needs to be a "registered hospital," said N. P. COLWELL, Chicago (*Journal of the A. M. A.*, March 30, 1929). This means that it must be a worthy institution free from even a suspicion of unethical practices. Admission to the hospital register, therefore, is the first step in the approval of a hospital by the American Medical Association, and approval for the training of interns is the next higher list for admission to which, also, further qualifications are essential. A third still higher group is made up of hospitals approved for residencies in the several specialties. With the great improvements brought about in medical schools during the last twenty-five years, the graduates have now obtained a far better training than formerly in the examination and care of patients under the supervision of their physician-teachers, so that the hospitals which provide internships need to have developed improved educational methods hereinafter outlined. The hospital internship is now recognized as the means of rounding out the student's undergraduate medical training and as the basis for further training leading to some specialty. Early in 1927 the Council adopted a ruling that, after January 1, 1928, no hospital would be approved for interns which did not obtain autopsies in at least 10 percent of the deaths occurring in the hospital and that, after January 1, 1929, the requirement be advanced to 15 percent. Briefly stated, to be approved for the training of interns, a hospital needs to develop its educational activities so that the intern will benefit from the improvements which will always result from such activities: (a) the staff members become more alive to the advances in medical knowledge and skill; (b) the equipment will be maintained in accordance with the more modern methods of

diagnosis and treatment; (c) the routine procedures in the hospital, including arrangements for heat, light, ventilation and diet will be the most efficient possible; (d) histories of all patients will be kept with extra care for educational purposes as well as with the desire for efficiency; (e) the hospital records, also, will be so kept that it may be known at any time just what is going on in the institution, and its autopsy reports can be utilized in case study and in pathologic discussions in connection with its regular staff conferences, and (f) in its persistent search for facts, various measures of educational value will be developed in the hospital which will result not only in a better training for its interns but also in providing the best possible care for its patients. Such activities unavoidably transform the hospital into an excellent continuation school for its staff members. Through the Council's own representatives, the first complete investigation is now being made of all hospitals approved for interns, or which apparently are eligible for such approval. The American Medical Association does not desire authority over any hospital, nor does it even assume that it has such authority. Because hospitals are service stations for the care of sick and injured people, and because physicians are responsible for the reputation of these hospitals, the American Medical Association is naturally interested in them and is proud of the marvelous extent of their improvements and the efficiency with which they are being maintained. The Association feels highly honored in the opportunity to cooperate with hospital staff members in the successful efforts they are making to provide an efficient service for their patients. With such an object in view, staff members are becoming increasingly alive to and are adopting improved methods for either diagnosis or treatment, and it is in such hospitals that interns can secure a most valuable training.

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Devoted to the Interests of the Medical Profession of Indiana

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EDITORIALS

RHEUMATISM FROM FOCI OF INFECTION

In a public talk concerning the causes of rheumatism and conditions commonly called rheumatism, Dr. E. B. Rentschler, of the Mayo Clinic, calls attention to Rosenau's discovery that there is a direct relationship between focal infection and arthritis as well as other diseases, and the frequency with which roots of teeth, crypts of tonsils, accessory sinuses, the prostatic gland, and sometimes the female organs may harbor germs that form foci of infection which may through transmission by lymphatics or bloodstream produce various local or systemic disturbances.

The foci most often found are infections in the tonsils and teeth. Evidence of infection at the roots of teeth may be revealed only by the roentgen-ray. Infection around the teeth, or pyorrhea, may be just as important to eliminate as an abscessed tooth. A pulpless tooth should be watched carefully for signs of trouble locally, or by pain, or by changes shown in the roentgenograms. There should, however, be sound reason for the sacrifice of any tooth. So far as the tonsils are concerned, Dr. Charles H. Mayo often has pointed out, that the small, atrophic or dried up tonsil may be more dangerous than a tonsil that is rather large and has the power to swell up. "A person who has thought he never had tonsillitis may find such a worn out tonsil the cause of arthritis, because it has lost its power to react and kill the germs in it." A great many people with chronically infected tonsils and very bad teeth fortunately never get rheumatism because their general resisting powers are kept high.

There are many physicians as well as lay persons that should know the relationship between foci of infection and certain pathologic conditions arising therefrom, and to realize, what we have been preaching in *THE JOURNAL* for some time, that you cannot tell by the size and appearance of a tonsil what it may contain in the way of infectious material that can produce systemic disturbances, nor can you always tell by the appearance of teeth what harm may result from a hidden root abscess which only a roentgenogram will disclose. Therefore, what has been said by

Dr. Rentschler to the public could be repeated in the hearing of many physicians who haven't quite appreciated the importance of the teaching in helping to alleviate humankind.

THE SINS OF OMISSION IN DENTISTRY

In the March number of *THE JOURNAL* we discussed the inconsistent craze for removal of teeth, and the opinions expressed seem to have met with the approval of a large number of prominent dentists and brought forth favorable comment from such an influential dental periodical as the *Journal of the American Dental Association* in its May number. In the light of what we are going to say now perhaps the former editorial should have been entitled "The Sins of Commission in Dentistry," for what we desire to discuss now is what many dentists fail to do and which we think should be done in the interests of better dentistry as well as in the interest of the welfare of patients. We would not have our readers believe that we are unduly criticizing the members of the dental profession when so much criticism justly can be aimed at many members of the medical profession for their sins of omission, but as the general welfare of many patients depends upon proficient as well as efficient attention on the part of both physicians and dentists it is well to call attention to what we consider to be an inexcusable error on the part of many dental surgeons in not being positive that their tooth extractions are complete. The subject is of great importance to medical men who are called upon to locate foci of infection as a known cause of so many disease processes, and who look to the members of the dental profession for trustworthy information as to the condition of the teeth.

That this subject is worthy of serious consideration is evidenced by the verbal statement of a member of one of the large clinics in this country to the effect that 33½ percent of all of the patients coming to the clinic who are wearing dental plates above and below, some of which plates have been worn for many years, are suffering from the effects of pieces of roots of teeth left by a dentist who did not do complete extractions. The further statement is made that 22 percent of all the patients coming to the clinic who have had one or more teeth removed are suffering from the effects of roots left and oftentimes covered over by beautiful bridge work. These roots of teeth are a possible source of trouble through infection, with perhaps long continued absorption and pathologic lesions in other portions of the body resulting therefrom. It is true that this error cannot be charged against all dentists, but that it can be charged against a very large percentage of dentists is evidenced by the statistics quoted, and those statistics are duplicated in the practices of many other clinics as well as in the practices of many individual physicians.

The remedy lies with the members of the dental profession, and is so simple of application that we wonder why it has not been applied before this, and very generally, for it consists in making a roentgenogram after every extraction, just as every surgeon has roentgenograms made after he has reduced a fracture. The additional expense is trivial, and the satisfaction to the operator, to say nothing of the increased trustworthiness of the service to the patient, amply justifies the service and additional charge. In fact, the day is coming, if it has not arrived already, when the dentist who fails to make sure by roentgenographic examination that he has extracted all of the roots of the teeth that he has been employed to extract, will be found guilty of malpractice by our courts, just as surgeons have been found guilty of malpractice when they did not utilize to the fullest extent roentgenographic examinations before and after reducing fractures. We sincerely hope that the dental journals and the teachers in dental colleges will lay stress upon this matter in the interests of better work on the part of dental surgeons, better service for patients, and last but not least, in the interest of better cooperation with the medical profession in endeavors to preserve health.

STUDY OF COST OF MEDICAL CARE IN INDIANA

A research program of considerable interest to the medical profession is that of the recently formed Committee on the Cost of Medical Care. This is a private organization created for the sole purpose of investigating certain aspects of the field of medical economics. Its chairman is Ray Lyman Wilbur, formerly president of Stanford University and ex-president of the A. M. A., and now secretary of the Department of the Interior. The chairman of the executive committee is C. E. A. Winslow, Professor of Public Health, Yale University.

The Committee is composed of representatives from the fields of private practice, and public health, from various institutions and the public. Certain noted economists also belong. More than twenty members are Doctors of Medicine. Among them are M. L. Harris, president-elect of the American Medical Association, Olin West, secretary of the American Medical Association, Lewellys F. Barker, of Baltimore, George E. Follansbee of Cleveland.

The research program will, according to the plans of the Committee, be completed at the end of five years. The finances are being provided by the Rockefeller Foundation, the Milbank Memorial Fund, the Twentieth Century Fund, the Julius Rosenwald Foundation and other institutions. Two of the studies, those dealing with physicians' incomes and capital investment in private practice are being conducted by the American Medical Association, which is also

meeting the cost. Similarly the Metropolitan Life Insurance Company is completing a project.

The list of studies has three major divisions:

1. Preliminary surveys of data showing the extent of disease and disability requiring medical services and of generally existing facilities for dealing with these conditions.

2. Studies on the cost to the family of medical services and the return accruing to the physician and other agents furnishing such services.

3. Analyses of specially organized facilities for medical care now serving particular groups of the population.

Under these main headings there are over twenty projects, including studies of "Irregular Types of Medical Practice," "The Service of Pharmacy," "Capital Investment in Hospitals and Clinics," and "Pay Clinics and Group Clinics."

What will be done with the results of the research? "It is the Committee's hope," states Ray Lyman Wilbur, "that the facts brought out by the various studies will make possible, at the completion of the program, a report summarizing results with recommendations for the provision of more efficient medical service for all the people, not only the rich and poor, but also persons of moderate means."

In Indiana particular interest centers upon the Committee on the Cost of Medical Care at present, because of the survey of Shelby County being conducted by the Committee. The survey, the first of its kind undertaken by this organization, will deal with the medical facilities available, the number of physicians, nurses, dentists, irregular practitioners and certain economic aspects of their activities. It will include the local hospital as well as public and private health activities.

Shelby County was selected as a fairly typical farming area and it is the expectation of the Committee that much light will be thrown on the problem of medical service in rural communities by a thorough study of this county.

THE CLEVELAND CLINIC DISASTER

Last month the press of the country conveyed the news of a terrible disaster, with large loss of life, caused by explosion and development of poisonous fumes from burning roentgen-ray films in the well known Cleveland Clinic. Whether the disaster was due to carelessness or not makes little difference now, though in all fairness to those who had control of the clinic it must be said that supposedly all necessary precautions had been taken to prevent such a catastrophe. On the other hand, the incident, with its tragic toll, will prove a lesson to clinics, hospitals, and all other enterprises or institutions where roentgen-ray films are stored, and if we are not mistaken many states and perhaps municipalities will pass stringent laws forbidding the storing of roentgen-ray films in buildings populated at any time by any

number of people. No doubt many institutions the world over have taken the cue from the Cleveland disaster and destroyed old films and made arrangements for storing all others in a manner that will preclude the possibility of repetition of such a calamity as befell the Cleveland Clinic. It was the Collingwood fire near Cleveland, with its terrible loss of child life made possible through inward swinging doors, that led to legislation requiring that all doors leading from school houses and other buildings where people congregate must swing outward. Probably it will be the Cleveland Clinic disaster that will lead to legislation that will prevent storing of roentgen-ray films except when there are rigid precautions. It is unfortunate that we must have such a terrible toll of human life in order to learn a few things of first importance. The storing of roentgen-ray films at all times is hazardous, and special provision should be made for storing films, and the number of records that are to be stored in one room should be limited.

THE COST OF MEDICAL CARE

The Committee on the Cost of Medical Care has an imposing list of members representing various interests, professional and public. A five year program has been arranged, and already the work of obtaining data has begun. In Indiana a cross section supposedly is represented by Shelby county, and in consequence that county has been selected for study. If we were to offer any criticism it would be that Shelby county does not sufficiently represent the industrial sections of the state where some of our greatest problems arise. So far as the scope of study is concerned, it aims to determine the established facilities for dealing with illness and disability, what the services cost the people, what return accrues to the physician and other agents furnishing such services, and the comparison that can be made between specially organized facilities for medical care serving particular groups of the population and how they compare in adequacy and economy with unorganized services.

In the preliminary report issued by the Committee it is stated that the physician has much at stake and for several reasons. Many physicians do not receive sufficient income to enable them to keep abreast of development of scientific medicine. Their earnings are reduced by free work among their clients, free work in hospitals and dispensaries, failure to charge for preventive work, and the high cost of equipment. Especially in rural communities does income appear inadequate. The fees of rural physicians for attending patients in seventeen Massachusetts towns were found to be only \$2 more than the taxicab charge for the trip alone, and in one instance the physician charged \$6 for services, including transportation, while the taxicab fare to the same town and back was

\$8! On the other hand, the man with a family of five earning \$200 a month, whose bill for medical services was \$545 during the six months period, has reason for complaint, and especially when it is discovered that in the next block there is a man whose wife recently died of cancer and the bills for surgeon's fees, nursing charges, hospital expenses and payments for various special services prescribed is more than \$6,000. He also has learned that around the corner a girl recently has paid out \$1,075 for a case of ruptured appendix, in addition to a surgeon's fee of \$500 reduced from \$1,000. Thus it will be seen, as the committee points out, that many people are interested in the high cost of medical care, and in dealing with this subject there are several related problems to be considered, not the least of which is the return accruing to the physician and other agents furnishing such services.

The Committee says that the ultimate question which must be faced is this: How can practitioners, equipment and technique required in modern medicine be utilized for the most efficient production of service? How can general practitioners and specialists, laboratory services, and various types of therapy requiring expensive equipment, be most effectively organized into unit agencies? And how can unit agencies and services, both private and public, be best coordinated into a well balanced program of preventive and curative medicine?

We have a "hunch" that many members of the committee will be interested in finding out whether socialized medicine or state medicine offers care that is equal to or better than that furnished by the individual practitioners of medicine in private practice, and that the cost will be in favor of State Medicine. We also have a "hunch" that the investigation will tend to develop the idea that the private practice of medicine should "get off the earth" if any form of community service, whether under the control of federal, state or municipal authority, can effect a saving in expense even if it lacks in quality. Lastly, we have a "hunch" that little attention will be given to the subject of adequate compensation for the physician, or to the cost of many incidental services that go with sickness and greatly increase the outlay of the individual. We believe that we can show that it is the incidental expenses, not the least of which is hospital and nursing care, that in this day and age greatly helps to make sickness and disability expensive, and that the amount paid to physicians forms but a small part of the total expense, even though many would have the public believe that it is the physicians who are to blame for the high cost of illness.

We have a great deal of confidence in the committee that has been selected to study this whole question, and we hope that an analysis of the findings will result in modification of the general plan of caring for the sick, but it will not

mean reducing the economic status of the individual practitioners of medicine who in general already receive small remuneration as a return upon capital invested and the quality of the services that are rendered. In fact there are not a few highly educated and well trained medical men who actually are making less than the skilled craftsman, and there are a great many physicians who are doing an immense amount of gratuitous medical and surgical work and reasonable fees for the same should be paid by either the patient or the community. Therefore, a feature of the scope of the work not mentioned in the proposed program should be a determination of the responsibility for medical and surgical care, and a plea for the general recognition of the fact that the cost of medical care, wherever it may be, must be charged to the individual or the community, and that hospitals, nurses and medical men must charge only such fees as are consistent with ability to pay and in keeping with the highest quality of service.

BABY CLINICS

Again the period approaches when we shall be surfeited with baby clinics, sponsored by health officers or benevolent associations, with the help of local physicians who are doing the heavy work. Recently the Bureau of Publicity of our Association was asked to approve a baby clinic to be put on in Indianapolis by a layman representing the National Lions Clubs. The Indianapolis Medical Society was expected to furnish some prominent medical men to make the examinations, and the highways and byways were to be canvassed for material. As usual the examinations were to be free and, as usual, the lay press was to feature the project in glowing if not extravagant terms. Fortunately the Bureau of Publicity took the stand that it could not endorse a baby clinic that provided free examinations for persons able to pay, and we understand that the officers of the Indianapolis Medical Society took a similar stand.

We sincerely hope that every county medical society in the state will follow the example set. The medical profession does not object to free clinics for the deserving poor, but it does object to furnishing valuable medical services free to those amply able to pay. Furthermore, the medical profession is distinctly opposed to the clinics of whatever nature that are put on by lay persons or anyone else where patients are run through like grain through a threshing machine with a resulting superficial examination and in many instances untrustworthy reports as to conditions found. Aside from all this, it is a mistaken notion to think that a few medical men can identify themselves with these public and well-advertised clinics and not receive and merit the condemnation and ill will of their confreres for taking part in such a publicity stunt of questionable value. We are firmly convinced that the time has come when the medical

profession as a profession must take more of an interest in the matter of health preservation rather than the cure of illness, but all work pertaining to that question must be done by the medical profession as an organized unit in any community, and not done by any lay persons or lay organizations. If the project like the baby clinic has any merit in it at all, it ought to be inaugurated and controlled by the organized profession.

PERSONAL MEDICAL ADVERTISING

Physicians from many sections of Indiana are sending us newspaper clippings concerning the advertising of members of our Association, the advertising sometimes being decidedly objectionable and at other times unobjectionable. Usually the clippings are accompanied by letters asking *THE JOURNAL* to offer comment.

There is a difference between advertising that is in bad taste and the advertising that is distinctly unethical. We have no fault to find with the physician who announces in the lay press that he has changed his location, or who publishes his card giving location, hours and perhaps the specialty he practices, providing he does not attempt to exploit himself through the claim that he possesses unusual ability, qualifications, or equipment, or that he has accomplished wonderful results in the treatment of any of his cases. In other words, a plain office card published in the lay press while perhaps in some localities considered in exceeding bad taste is not sufficiently objectionable to warrant public criticism, or action on the part of any medical society. On the other hand, when a physician exploits himself by giving for publication, or permitting to be published, accounts of his successes in professional work, or holds himself out as better qualified by way of training or equipment to care for the general or specific ills of the community, he breaks all the rules of decency and even ethics and deserves condemnation. As the principles of ethics well says, "the most worthy and effective advertisement possible is the establishment of a well-merited reputation for professional ability and fidelity."

A CAMPAIGN is under way to secure a permanent endowment fund of \$2,500,000 to be devoted to an investigation of otosclerosis found in chronic, progressive deafness. The Carnegie Corporation has donated \$90,000 to the enterprise, which is sponsored by the American Otological Society. If investigation results in the discovery of the cause and cure of this form of deafness, a very great social and economic problem will have been solved.

How many members of the Indiana State Medical Association have advised their patients to have a complete physical examination and prevention inoculation for typhoid before going on a vacation?

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

AN ex-president of the A. M. A. was a member of Coolidge's cabinet and later was campaign manager for Mr. Hoover. An ex-president of the A. M. A. is now a member of Hoover's cabinet. Certainly the legitimate recommendations of the medical profession should receive the respectful consideration of our chief executive when he has two such prominent men as advisers.

DON'T give professional advertising to programs or year books of churches, lodges or benevolent associations. If you have any money to give, donate it outright to the institution and not to a solicitor who probably is getting a handsome commission for his work. Also don't forget that there are many fraudulent promotion schemes masquerading under the name of charity or Christianity.

DR. JOHN L. CHESTER, of Detroit, has asked us to comment on his paper entitled "Potassium Permanganate in the Treatment of Pneumonia," which appeared in the *Annals of Internal Medicine* for May, 1929. We prefer to publish the abstract he has submitted, and the same appears in our department devoted to abstracts. Doctor Chester's results in apparently hopeless cases seems to justify a trial of the treatment used by him.

AGAIN we desire to remind our readers that the department devoted to "Truth About Medicines," published in each number of THE JOURNAL, is worthy of the serious consideration of every progressive physician. In this department will be found the findings of the Council of Pharmacy and Chemistry of the A. M. A. concerning various New and Nonofficial Remedies, and trustworthy information concerning frauds and near-frauds in therapeutic agents or proprietary remedies.

LOUIS LUDLOW, a former newspaper man, is now representative in Congress for the seventh district of Indiana. Recently a telegram sponsored by the Indiana State Medical Association was sent to Mr. Ludlow objecting to the proposed increased tariff upon surgical instruments, as proposed in a bill now pending in Congress. Mr. Ludlow wired back that he is opposed to the bill

and would back the medical profession in efforts to prevent its enactment into law. All praise for Louis Ludlow!

A CHICAGO physician, talking about the future prospects of the general physician, says: "Where is the family physician's opportunity to utilize his talent?" His prospects are absorbed by lying-in hospitals, infant welfare stations, part pay and charity clinics, and by the insurance companies who secure, among others, the patients suffering from minor surgical conditions. Certainly, the outlook for the general physician in the larger cities is gloomy indeed, and especially with city and state health departments among his first competitors."

OCCASIONALLY a malingerer is able to fool physicians and jurors and secure heavy financial awards in consequence. A lawyer friend of ours informed us that a large judgment granted in such a case later was reversed through the part played by a moving picture of the malingerer which showed him as not possessing the injury which formed the basis of the complaint and judgment. As our lawyer friend said, the moving picture when obtainable is tell-tale evidence that outweighs all of the testimony of any number of witnesses, as it is evidence that a jury will not discount.

AN Associated Press news note of recent date says that while there are over fourteen thousand millionaires in the United States there are only three billionaires in the country! How shocking! The tone of the article naturally would make us believe that there is something wrong when we can develop only three billionaires. Well, no one can say that we haven't burned enough midnight oil and worked hard enough to get into the billionaire class, but so far have only secured enough coin of the realm to obtain shelter, clothing and food, and a little spare change left over with which to buy fishing tackle.

"THE collection agency stunt is one of the best ones to work if you want to make money easily." So says a scoundrel who was arrested in the east for failing to turn over money that had been collected through what is known as a guaranteed collection agency. Probably physicians have been buncoed more often than any other class of people by swindling collection agencies. Don't trust a collection agency unless you can establish that agency's honesty of purpose and intent. The wise physician is the one who acts as his own collection agency through himself or a representative whose trustworthiness has been tested.

THE medical license of Dr. Charles C. Root, proprietor of the Indianapolis Cancer Hospital, has been revoked by the State Board of Medical

Registration and Examination. Dr. Root was found guilty of charges of misrepresentation and fraud filed by the Indianapolis Better Business Bureau. Again we desire to say that better business bureaus throughout cities in Indiana well could take a lesson from the Indianapolis Better Business Bureau in attempts to suppress medical quackery, and they ought to be encouraged in the work by medical societies that in turn should help support the better business bureaus through membership.

THE Bureau of Publicity of the Indiana State Medical Association has released for publication in the lay press an article in which typhoid vaccination is urged, and attention is called to the matter because now is the time to prevent typhoid fever before people start on their vacation trips, and thus come in contact with many different drinking waters and possible typhoid carriers. We would like to emphasize that every physician in Indiana should go out of his way to acquaint the public with the benefits accruing from typhoid vaccination. Also it always is appropriate to emphasize the value of vaccination for diphtheria, scarlet fever and smallpox.

THE hay fever season approaches. The modern methods for treating hay fever consist in first finding the particular pollen that is responsible for the trouble. This can be determined by skin tests with extracts of the various prevalent pollens. Having found the pollen or pollens which are responsible for the hay fever it is an easy matter to obtain the extracts of those pollens for the treatment which may be given by any physician. The inoculation prevents a fairly large proportion of cases from developing, the percentage being large enough to make it worth while to go to the necessary trouble and expense. Preventive treatment should be started now.

NOT content with circularizing the members of the dental profession concerning the use of Somnoform, the distributors of that preparation now are soliciting patronage from members of the medical profession. For the benefit of physicians who may think that they desire to try Somnoform as an anesthetic we desire to say that the Council on Pharmacy and Chemistry of the A. M. A. has declared Somnoform inadmissible to New and Nonofficial Remedies because in the absence of acceptable evidence as to its exceptional safety and value, the claims are unwarranted, and because the name of the mixture is not descriptive of its composition.

IN commenting on the fact that President Hoover has appointed a board the majority of whom are lawyers, Will Rogers says, "why not appoint as members of the board a few men having some common sense?" It looks as though

Rogers might have been "stuck" for a good bill for legal services sometime during his career. We wonder what he would have said had Hoover appointed a board composed largely of physicians? Not long ago Rogers had an operation, employed to save his life, but we doubt if his surgeon ever charged him as much as the average attorney would charge him for making out his income tax or writing his last will and testament.

ECUADOR's new public health law, enacted in 1927, prescribes short terms of imprisonment or fines ranging from about 20 cents to \$20 or both fine and imprisonment, for mothers who decline to nurse their infants at the breast, unless a physician has certified their inability to do so. Similar penalties are prescribed for placing a child with a nurse who has not a physician's certificate of health, for failure to have a child vaccinated against smallpox within a certain time, for failure to provide medical care for a sick child promptly if neglect results in death, and for leaving a child locked in a house alone.

(Metropolitan Life Insurance Company Nursing Service News Letter.)

THE Cleveland Clinic disaster, with its death toll from gas of nearly 150 people, ought to indicate to the people what could happen in time of war if bombs containing this deadly gas were dropped upon a half dozen of our large cities. Furthermore, as Arthur Brisbane well says, what would prevent a foreign nation from dropping those bombs upon any of our eastern cities, in consideration of the fact that we have little or no adequate means of defense from such attacks? We hope there will be no more wars, but probably no one believes that wars are ended, and it is just as well that this richest nation on earth should be prepared to adequately and effectively defend itself in case of attack.

FORTUNATE is the physician who learned how to play when he was young and has kept on playing when older and perhaps struggling to make a living for himself and family. Play is absolutely necessary in order to cause relaxation of the mind and improve the general physical condition. "All work and no play makes Jack a dull boy" is applicable to the old man as well as the young boy. Anything can be carried to excess, with loss of interest in it as well as loss of the best results coming from it, so play should be indulged in judiciously, but you cannot make a live, progressive and trustworthy physician by compelling him to stick to the grindstone day in and day out without something to break the monotony.

IT is hoped that there will be a good representation of Indiana physicians at the Portland session of the A. M. A. Practically every railroad running west of Chicago is carrying special

cars to Portland, with the privileges of stop-overs at scenic points enroute. All of the western lines also are offering excursion rates. The North-western railroad has been selected as the one offering a tour that takes in many points of interest enroute, and which is furnishing special cars for the Indiana physicians, their wives and friends. It will enable friends and congenial people to travel together. However, most of the other through western lines offer equally as attractive tours, to say nothing of rapid transportation for those who want to go and get back as quickly as possible.

THE Indiana State Board of Health will furnish to physicians printed slips that may be included in correspondence with patients urging diphtheria prevention through the use of toxin-antitoxin. The circulars read as follows:

DO YOU KNOW THAT

Diphtheria is unnecessary and ALL CHILDREN can be protected from diphtheria

FOR LIFE?

HOW?—By toxin-antitoxin.

WHEN?—A good time is now.

The best time is at six months of age.

WHERE?—By your own physician.

WHY?—To remove for all time the possibility of your child taking diphtheria.

INDIANA STATE BOARD OF HEALTH

Wm. F. King, M.D.

State Health Commissioner

THE Fort Wayne Medical Society, one of the most prominent in the state, is about to consider a plan whereby the community chest officials, representing the associated charities of the city, will arrange to pay the society for all medical and surgical services rendered the deserving poor. It is not expected that established fees will be allowed, but the plan that will be offered will be on the very consistent basis that the community should pay for medical and surgical services, the stock and trade of the physician rendering them, just as the community pays for other necessities furnished the poor. When this is done the soliciting committees of the community chest can come to physicians with a clean slate and ask for donations just as they ask for donations from other citizens who are able to pay something toward the common welfare.

ONE of the leading physicians in the United States and a teacher in one of the large universities, in commenting upon the loss of teeth at an early age in so many of the people of this country, says that what is needed is more education concerning proper diet. Care of the teeth, and particularly of the gums, is essential, but selecting a goodly portion of the right kind of food for maintaining the health and vitality of teeth

is more essential. Generally speaking this means eating more food having calcium and other salts necessary for good teeth. No simpler way can be found than in drinking more milk as a part of the daily diet, eating whole wheat bread, and partaking liberally of fresh fruits and vegetables. Such articles of food are not to be taken to the exclusion of others, but they should form a part of the daily diet.

FOR some reason or other we have been led to believe that the electrocardiograph is the last word as an aid to diagnosis and prognosis in heart affections. Accordingly it came as a rather rude shock to hear a heart specialist say that we really know very little about how much dependence we can place upon the electrocardiograph, because while it does give very definite information as to what exists, it does not tell us anything about how long the condition has existed nor in many instances what the probable prognosis is after a discovery of the electrocardiograph findings. In other words, while the electrocardiograph may furnish findings that are not found by careful physical examination, the question remains, how shall we interpret those findings? Time and repeated electrocardiographic examination of individual patients and in a very large number of cases will be required to settle some of the controversial questions. At best "the electrocardiograph should be emphasized in clinical medicine only as an adjunct to other clinical methods of diagnosis."

THE United States, the richest and the most ungrateful nation on the face of the earth, has just granted the munificent and extravagant sum of \$125 per month to the widow of the physician who conquered pellagra by identifying it as a disease caused by diet deficiency and finding the food element necessary to combat it after the problem had baffled the best medical talent of Europe for two centuries. This physician of the United States Public Health Service died last year, a victim indirectly of the disease he devoted his life to master. His service is credited with saving countless thousands of lives. The widow, left almost penniless and with three children to support, had assisted her husband by submitting herself to the dangers of pellagra to prove the theory of her husband that the disease was not transmissible. For this service to humanity our national congress, infested with grafting politicians, made a niggardly appropriation for the penniless wife and three children. Such pusillanimous penuriousness should bring the blush of shame to every red-blooded American.

As a sidelight on the work of the Public Health Institute, the policies of which have been condemned by the Chicago Medical Society, it is well to consider that the Institute claims to treat two

thousand patients daily, and there are only thirty-three medical attendants to do this amount of work. One physician takes care of some sixty-five patients in a day of six or seven hours not allowing for any absent members of the staff. Is it conceivable that the patient could get thorough and trustworthy treatment under those circumstances? Among some of the expenses are \$100,000 per year turned over to newspapers for advertising, \$25,000 for charitable purposes, \$25,000 to \$50,000 a year to universities for so-called research work, \$25,000 a year as a salary to the director, to say nothing of many other expenses, and yet the Institute last year made a profit of more than \$100,000 above all expenses! It is claimed that men who stand high in the world of finance are sponsors for the Institute, and are guarantors of the good work that is done. On the other hand, it is claimed by prominent members of the Chicago Medical Society that men of considerable reputation for high attainments in medicine in general and in the specialties are conspicuous by their absence in connection with the Public Health Institute.

CHRISTIAN Science inconsistency was manifested last month in the city of Fort Wayne where twenty cases of smallpox in the public schools were reported. The child of one of the teachers came down with a high fever, and it was suggested that a physician be called, but the parents, who were Christian Scientists, protested and said that they preferred to handle the case in their own way. Forthwith they called a Christian Science practitioner, and a few hours later they reported with apparently great satisfaction and glee that the fever had subsided immediately under the influence of the Christian Science ministrations. Their joy was short-lived, for true to the nature of the disease, the drop in the temperature was followed by an eruption which was later diagnosed by the health authorities as smallpox. Subsequently the father seemed quite willing to submit to vaccination, though he probably gave as his excuse that he could not return to his school duties until he had been vaccinated. In reality we think that the adult Christian Scientists should be permitted to test out the efficacy of their peculiar beliefs while stubbornly refusing to be vaccinated. It might prove to be a severe penalty to pay for such idiotic nonsense as to believe in Christian Science not only to prevent but cure disease, but perhaps the lesson would have a salutary effect upon sympathizers.

We always have enjoyed McIntyre's columns in the daily papers in which they appear, and even though at times he has appeared cynical, yet we have felt there was considerable sense and logic to much that he has said. However, we

have lost much of our admiration for him and his criticisms and comments after reading his puerile condemnation of animal experimentation or vivisection. He, like others who are fighting animal experimentation, is inconsistent and irrational, for he permits maudlin sentiment to have full play, to say nothing of neglecting to carry his theories to the ultimate conclusion which in the final analysis would mean not even utilizing animals for food. At the present time animal experimentation is more humane than commercial practices require in giving us animal food. McIntyre seems to hold a grudge against the medical profession on general principles, so that may be one reason why he enlists his services with the anti-vivisectionists. Perhaps the day will come when he will be glad to seek and receive the services of a trustworthy physician, and perhaps the very service given him will owe its efficacy to the results obtained through vivisection. The consistency of most of the anti-vivisectionists reminds us of what Abe Martin said concerning the woman who was strong for anti-vivisection but he noticed that she wrung a chicken's neck twelve time before she succeeded in killing the chicken.

IN previous numbers of *THE JOURNAL* we have had occasion to comment on the complaint made by one Howard W. Ambruster, of New York City, that the government is aiding various pharmaceutical manufacturers in thrusting upon the American public large quantities of adulterated and inactive ergot. Now comes Mr. Ambruster with a personal letter to us which says, in part, "A mutual friend has advised me that you are one of the few medical editors who would have the independence and courage to discuss openly in your columns the adulterated ergot situation."

While we appreciate the compliment we are frank in saying that we are not ready to indict the government and all of the well-known pharmaceutical manufacturers on evidence furnished by one who, as we quoted from *Time*, has a corner on the ergot market. Furthermore, it seems strange that the contentions, if true, should fall on deaf ears among government officials and all of the host of well-known and reputable pharmaceutical manufacturers. We admire Mr. Ambruster's scrapping ability, and if his argument is sound he is bound to win in the end, but for reasons already expressed in previous numbers of *THE JOURNAL* we feel that he may not be altogether correct in his insinuations or accusations, for if he has a corner on Spanish ergot so much desired by pharmaceutical manufacturers there will be reasons for looking at the proposition with astigmatic vision.

WE have been interested greatly in a statement published in the *Guildcraft*, the magazine published by the Guild of Prescription Opticians

of America, Inc., in which we find these paragraphs:

"The only cases of refraction which refracting opticians can handle with any amount of accuracy are presbyopia, and here they are continually in trouble from the number of diseased eyes which they overlook. Optic atrophy, glaucoma, retinal degeneration are all too frequent after middle life for eyes to be safe in untrained hands.

"Chronic glaucoma in its early stages is very apt to be overlooked, and this is the time that a recognition of the increase in ocular tension is most useful, before it does much damage to the structures of the eye.

"The public will be best served by absence of attempts to confuse the work of the eye physician and the optician, just as it will be served by a separation of the duties of the physician of internal medicine and the apothecary."

The general practitioners of medicine could well afford to pay serious attention to the matter referred to in the *Guildcraft*, for it is no uncommon thing for them not only to refer their patients to opticians or even jewelers for the adjustment of glasses, but to accept such services for themselves. That this latter practice is not free from penalties is evidenced by the numerous instances in which ophthalmologists have seen well-advanced cases of simple chronic glaucoma in general physicians who have been content to have their eyes examined by opticians or jewelers on the assumption that as presbyopes they require nothing more than trying on lenses in order to secure an appropriate correction of an error of refraction. A well trained ophthalmologist will detect these cases of simple glaucoma in their incipency and prescribe appropriate treatment, with the resulting retardation of the progress of the disease in a majority of instances.

THE president-elect of our Association has a communication in the Correspondence Department of this number of THE JOURNAL in which he calls attention to one of the pertinent causes for the complaint concerning the high cost of medical care for the middle classes, and the resulting attempt to cure it in Chicago by the establishment of a so-called health institute sponsored by laymen. He refers to the extortionate charges made by some physicians for services rendered people in moderate circumstances, and it is those men who must bear the burden for the entire profession if some sort of state medicine is put into effect as a remedy. For instance, referring to THE JOURNAL of a few months ago, there is indisputable evidence to show that a few leading surgeons of Chicago have charged salaried stenographers and clerks \$1,000 and sometimes more for an appendicitis operation, and that these same grasping surgeons have attempted to force collection of exorbitant fees from small estates, and in one instance a man of modest means mortgaged his

home to pay a five thousand dollar fee in advance to a grasping surgeon.

Generally speaking, the problems of Chicago are not the problems of the smaller cities and towns, but as usual, many suffer for the sins of the few. We have no quarrel with the man who charges and collects large fees from those amply able to pay, for it is well known that such people do not balk when it comes to paying the excessive fees of lawyers, and they do not hesitate to indulge in wild extravagances to satisfy expensive tastes, so there is no reason why there should be any leniency when it comes to exacting fees for valuable medical and surgical services. On the other hand, it is inconsistent and unfair to hold up the man of moderate means for fees that prove a very great hardship for him to pay. So far as the indigent and poor are concerned, they usually are cared for gratuitously by our clinics and dispensaries, and even that is a very great wrong, for the community in which the indigents live should pay a reasonable fee for the services rendered. Now the question arises as to whether the medical profession will solve the problems that have been forced upon us by lay persons, or through an apathetic and unsympathetic attitude force others to solve the problems for us.

A NATIONAL Society for the Prevention of Blindness has issued a statement for publication in the lay press in which it exposes the mail-order spectacle quackery. It points out that the eyesight of thousands of persons is being jeopardized by spectacles sold through newspaper and magazine advertising by unscrupulous mail-order houses. The practice is both a fraud and a menace. A person with even ordinary common sense ought to know that it is impossible for glasses to be fitted properly by mail. Probably the most serious aspect of the question, as pointed out by the circular, is the missed medical problem. Many disease conditions may be concealed by lenses. Another fraud of the mail-order advertisers is that pertaining to eye exercises which are recommended in connection with the advice, "Throw Away Your Glasses." To follow this advice may result in serious eyestrain and may even cause profound disturbances of the nervous system. As pointed out by the bulletin, "This quackery is foisted on the American public in two ways, first, through advertising in the daily press and various weekly and monthly publications, and, second, through disciples of this method who travel from city to city, and with the help of advertising in the local press, hold meetings at which their so-called aids for better eyesight are sold." How unfortunate it is that we cannot get the better business bureaus and the better advertising clubs to bring such pressure to bear as will lead the lay publications to reject such quack advertising, even though profitable from a financial point of view.

SECRETARIES DEPARTMENT

ANNUAL SECRETARIES' CONFERENCE

Lively discussion, a big turnout, and an all-round good time marked the second annual spring dinner-conference of county society secretaries at the Columbia Club in Indianapolis May 2. M. L. Harris, M.D., of Chicago, president-elect of the Americal Medical Association, was the principal speaker of the evening and in his talk "The Economic Value of Medical Service," he gave in detail his plan for the establishment, management, ownership and control of clinics by local county medical societies where medical services would be available for persons of moderate means at a minimum fee.

Preceding the talk by Dr. Harris, the conference elected A. M. Mitchell, M.D., of Terre Haute, secretary of the Vigo County Medical Society, as chairman for the coming year to succeed J. C. Burkle, M.D., of Lafayette, the outgoing chairman, and upon the invitation of Dr. Harris, selected Chicago as the meeting place for the 1930 spring conference.

In addition to Dr. Harris, five-minute talks were made by the following secretaries: E. S. Parmenter, M.D., Fort Wayne Medical Society, and Dr. Mitchell, of Vigo County, upon "Better County Society Programs;" V. L. Turley, of Benton County, and O. G. Brubaker, of Wabash County, upon "Small and Medium County Society Problems;" A. L. Spinning, of Fountain-Warren County, upon "Problems of Combined County Societies;" G. A. Collett, of Montgomery County, upon "Problems of Larger County Medical Societies."

Many interesting points were brought out in the general discussion and many questions were asked Dr. Harris in regard to the details of his proposed plans. The high points of this discussion will be carried in the pages of THE JOURNAL.

Among the guests of the secretaries were: C. E. Gillespie, Seymour, president of the Indiana State Medical Association; A. C. McDonald, Warsaw, president-elect; David Ross, Indianapolis, and Wm. H. Kennedy, Indianapolis, members of the state Executive Committee.

The following councilors: J. H. Weinstein, Terre Haute; J. H. Hare, Evansville; E. E. Padgett, Indianapolis; B. G. Keeney, Shelbyville; G. D. Scott, Sullivan.

Frank W. Cregor, member of the Judicial Council of the American Medical Association; Murray N. Hadley, president, Indianapolis Medical Society; C. N. Combs, past president and past secretary of the State Medical Association; William F. King, secretary of the Indiana State Board of Health.

J. R. Baum, Warsaw; C. L. Bock, Muncie; C.

L. Botkin, Muncie; A. G. W. Childs, Madison; E. H. Clauser, Muncie; C. R. Hoffman, Richmond; I. J. Kwitny, Indianapolis; W. C. Reed, Bloomington; H. P. Ross, Richmond; Ernest Rupel, Indianapolis; Ward A. Smith, Otterbein, and C. E. Stouder, Gosport.

Allen County—E. S. Parmenter, Fort Wayne.

Benton County—V. L. Turley, Fowler.

Clark County—H. H. Reeder, Jeffersonville.

Delaware-Blackford County—T. R. Owens, Muncie.

Floyd County—P. H. Schoen, New Albany.

Fountain-Warren County—A. L. Spinning, Covington.

Grant County—Frances Johnson, Marion.

Hamilton County—Ray Shanks, Noblesville.

Hancock County—J. L. Allen, Greenfield.

Jefferson County—O. A. Turner, Madison.

Jennings County—D. M. McAuliffe, North Vernon.

Lawrence County—R. B. Smallwood, Bedford.

Marion County—Chester A. Stayton, Indianapolis.

Monroe County—F. H. Austin, Bloomington.

Montgomery County—Geo. A. Collett, Crawfordsville.

Noble County—W. F. Carver, Albion.

Owen County—R. H. Pierson, Spencer.

Sullivan County—J. B. Maple, Sullivan.

Tippecanoe County—J. C. Burkle, Lafayette.

Tipton County—H. E. Grishaw, Tipton.

Vanderburgh County—Keith T. Meyer, Evansville.

Vigo County—A. M. Mitchell, Terre Haute.

Wabash County—O. G. Brubaker, North Manchester.

Wayne-Union County—P. S. Johnson, Richmond.

Wells County—Max Gitlin, Bluffton.

The committee on arrangements was: J. C. Burkle, Lafayette, chairman; E. R. Clarke, Kokomo; E. M. Shanklin, Hammond; C. A. Stayton, Indianapolis; G. A. Collett, Crawfordsville; A. M. Mitchell, Terre Haute.

Dr. Mitchell nominated by Dr. Maple, seconded by Dr. Johnson for chairman for next year. Carried.

Dr. Burkle: The idea is to get men out from far points. It is really the county society as a society that gets the benefit of these meetings. Shouldn't the county society bear the expense of the secretary in coming to these meetings? It seems to me it should be borne where the benefit goes. Shall we always have the meeting here or somewhere else?

Dr. Harris: I should like to extend to the secretaries of the county societies of the state of Indiana, in behalf of the American Medical Association, an invitation to meet in Chicago. We had meetings of the secretaries of different states, Wisconsin and Michigan, just recently, in the

last two or three months. The meetings have been very successful and we would like to have the county secretaries from the different states meet in Chicago. I assure you a very good time, where you can look over the institution of the American Medical Association, become more familiar with the work it is doing, and I am sure it would be of great benefit to you all to see how it works. I wish to extend to you, on behalf of the American Medical Association, a very kind invitation to have you meet in Chicago.

Dr. Burkle: Any further discussion along this line? I believe that is a very good suggestion of Dr. Harris.

Dr. P. S. Johnson: I heartily approve of the Chicago invitation. As a matter of routine I favor Indianapolis as a meeting place from year to year.

Dr. Ross: Probably it would be of some value if the secretary of the state society would direct a communication to some one of his acquaintances bringing up the subject of expense of attending these conferences. That would bring the question around so the secretary would not be embarrassed by asking the society to pay his expenses.

Dr. F. H. Austin: I make a motion that the next meeting be held in Indianapolis. As to the secretary bearing the expense, I think the secretary gets enough out of the meeting to pay his own expense.

Ayes—8.

Noes—10

Dr. Parmenter: Since this motion is lost I would like to make motion that the secretaries' meeting next year be held in Chicago and we accept the invitation of Dr. Harris. Motion carried—

Ayes—16.

Noes—3.

Dr. Burkle: We haven't got a start at this corresponding and discussion through *THE JOURNAL*. We should have more publicity in *THE JOURNAL*. By that I mean more catchy headlines, larger type, so when you turn through *THE JOURNAL* you can see where the secretaries' page is. The secretaries should carry on discussion through the year through *THE JOURNAL*.

This meeting is very fortunate, I think, in securing the speaker we have this evening. Dr. Harris travels from one end of the country to the other. He is going all the time. . . . Again I think we are very fortunate in having with us Dr. M. L. Harris, of Chicago, who will speak on the subject, "The Economic Value of Medical Service."

HIGH POINTS OF DR. HARRIS' PAPER

"As president-elect of the American Medical Association it has been a very great pleasure moving around in the country visiting societies and meeting those who are really active in the profession and carrying on the work of organization of

the profession. I assure you it is a very great pleasure to be here and I want to thank you for your acceptance of my invitation to meet in Chicago next time and I assure you a very good time so that you will want to make that your headquarters every year."

"Medicine is the only profession that has its origin in the emotion."

"In the early Christian era the study of anatomy was conducted with the greatest difficulty as the law prohibited the dissection of animals, one of the most important and essential means of the study of anatomy."

"Under the law a physician cannot operate without the consent of the parents. More than once I have had to stand by and see a child die because the parents refused to have the child operated."

"Civilization as we find it today would be impossible were it not for the medical sciences. The modern city was impossible until medical science banished epidemics from the earth."

"It was not long before industries learned that the establishment of a competent medical service for the care of the injured was a paying investment from a financial standpoint . . . Such an arrangement has enabled them to get a lower rate on insurance which they must carry . . . By keeping the employees physically fit the amount of money saved by employer and employees runs into millions of dollars a year."

"Can anyone claim that the profession has been overpaid for the services it has rendered to humanity?"

"Medical service is not a commodity that can command other commodities in exchange. Its value must depend on its utility or its fitness to satisfy human needs or desires."

"Too large a fee that is beyond the patient's ability to pay is a moral wrong. Too large a fee that is exorbitant notwithstanding the ability of the patient to pay is an injustice."

DR. HARRIS' PLAN OF COUNTY ORGANIZATION

"Many people are becoming concerned by what they term 'the high cost of medical care.' A great many volunteer organizations (5,000 in the United States) are making investigations along this line. In Chicago there have been set aside huge sums for this purpose. The existence of these organizations is the belief that the profession has failed to provide suitable means for the distribution of medical care to all of the people."

(To be continued in July issue)

DEATHS

ROLLA W. CAMPBELL, M.D., of Indianapolis, died May 11, aged seventy-four years. He graduated from the Physio-Medical Institute of Cincinnati in 1879.

PHILLIP C. HOLLAND, M.D., of Bloomington, aged eighty-eight years, died May 15. Doctor Holland was not in active practice at the time of his death. He was a graduate of the Medical College of Ohio, Cincinnati, 1869.

HENRY H. STOUT, M.D., formerly of Cicero, but who had been making his home for the past few months in Terre Haute, died on April 16, aged eighty-nine years. Doctor Stout graduated from the Indiana Medical College, Indianapolis, in 1871.

A. L. PALMER, M.D., of Logansport, died May 3, aged fifty years. He graduated from the Rush Medical College, Chicago, in 1903. He was a member of the Cass County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

GEORGE MILLS, M.D., of Evansville, was fatally injured when struck by an automobile May 14th. Doctor Mills formerly was superintendent of the Boehne Tuberculosis Hospital at Evansville. He was thirty-seven years of age. He was a member of the Vanderburg County Medical Society, the Indiana State Medical Association and the American Medical Association, and was a graduate of the Emory University School of Medicine, Atlanta, Georgia, in 1915.

NEWS NOTES AND PERSONALS

THE Fifth District Medical Society held a meeting at Brazil, May 16th.

DR. EDWARD W. GOODWIN, of Newcastle, celebrated his 90th birthday April 24th.

MRS. WILHELMINA J. BAHR, wife of Dr. Max A. Bahr, of Indianapolis, died May 10th.

THE Delaware-Blackford County Medical Society held a picnic at Hickory Crest Lodge, May 22.

THE Clay County Medical Hospital observed National Hospital Day with a musical program, May 19th.

DR. H. R. ALLEN, of Indianapolis, has returned from his second successful hunting trip in Africa.

DR. FRANK JAY, of Chicago, died May 12th.

Dr. Jay was the son of Dr. Milton T. Jay, of Portland, Indiana.

THE Arnett-Crockett Clinic has announced its removal to its new clinic building Eighth and Ferry Streets, Lafayette.

MISS LOTTIE ANTIBUS, and Dr. James McCoy, of Vincennes, were married at the Lincoln Hotel, in Indianapolis, May 7th.

DR. JAMES A. WORK, of Elkhart, has gone to Vienna where he will take special work in gynecology and obstetrics.

DR. LARUE D. CARTER, of Indianapolis, has received a fellowship in the American College of Physicians in honor of contributions he has made to clinical medicine.

AT the May 7th meeting of the Muncie Academy of Medicine, Dr. Stuart Pritchard, of Battle Creek, Michigan, presented a paper on "Pain in the Thorax."

THE scientific session of the American Heart Association will be held in Portland, Oregon, on July 9, 1929, during the meeting of the American Medical Association.

DR. FRANK A. BRAYTON has returned from a three months trip in the southwest, part of which time he spent in visiting his brother, Dr. Nelson D. Brayton, of Miami, Arizona.

DR. R. H. BEESON, of Muncie, was made president of the Muncie Academy of Medicine at its meeting held May 14th. Dr. E. C. Davis was made vice-president; Dr. Howard E. Hill, secretary, and Dr. U. G. Poland, treasurer.

THE Madison County Medical Society held its regular meeting May 20th, at the Madison County Tuberculosis Sanitarium, as guests of Mrs. Kehrner. Following the dinner, Dr. Stephen Douglas, of the Sunnyside Sanitarium, gave an address on "Juvenile Tuberculosis."

THE Owen County Medical Society held a dinner meeting at Canyon Inn, McCormick Creek State Park, May 21. Dr. David R. Uler, of Terre Haute, presented a paper on "Treatment of Fractures of Small Bones." This was the first meeting of the society in more than ten years.

THE last meeting of the Indianapolis Medical Society for this season was held at the Athenaeum, May 28th, with papers presented by Doctors H. M. Trusler, Olin B. Norman, Horace M. Banks and Ross C. Ottinger. The next meeting of the Society will be held October 1, 1929.

FOLLOWING thirty-four years of service with the house of Parke-Davis and Company, Dr. E. M. Houghton retired from active duty on May 1, but will continue as a member of the company's executive staff, with the title of Consulting Director of the Research and Biological Laboratories.

THE May meeting of the Indianapolis Ophthalmological and Oto-Laryngological Society was held in conjunction with the Indianapolis Medical Society, May 21st. Dr. Samuel J. Kopetzky, of New York, addressed the meeting upon "The Present Status of the Problem of Progressive Deafness."

DR. CHARLES P. EMERSON, dean of the Indiana University School of Medicine, has been invited to give the Carpenter Lecture before the New York (City) Academy of Medicine, October 17th, 1929. This is one of the annual lectures, supported by a permanent foundation created for that purpose.

THE U. S. Civil Service Commission announces open competitive examinations for trained nurse and trained nurse (psychiatric), applications for which positions must be on file with the Civil Service Commission at Washington, D. C., not later than June 25. Examinations are to fill vacancies in the Panama Canal Service.

THE United States Civil Service Commission announces open competitive examination for Bacteriologist, applications for which position must be on file with the Civil Service Commission at Washington, D. C., not later than July 3rd. Examination is to fill a vacancy in the U. S. Public Health Service, Honolulu, Hawaii.

THE final seminar of the year of the Indiana University School of Medicine was given over to the Alpha Omega Alpha, honorary medical fraternity, in accordance with the annual custom. The meeting was held May 24th. Introductory address was made by Dr. Thurman B. Rice. Dr. Charles P. Emerson presented an address on "The Emotional Element in Disease."

THE forty-first semi-annual meeting of the Eleventh Indiana Councilor District Medical Association was held at the Hotel Lafontaine, Huntington, May 16th. In the forenoon Dr. Frank Smithies, of Chicago, held a clinic at the Huntington County Hospital. In the afternoon papers were presented by Dr. Smithies, of Chicago; Dr. Lloyd H. Ziegler, of the Mayo Clinic, and Dr. G. G. Eckhart, of Marion.

AT the close of the convention of the Indiana Hospital Association held in Indianapolis in

April, Albert G. Hahn was re-elected president; Dr. William A. Doeppers, superintendent, Indianapolis, president-elect; Mrs. Luella Cox, Gary, first vice-president; Edward Rowlands, Indianapolis, second vice-president; Miss Gladys Brandt, Cass County Hospital, Logansport, re-elected executive secretary, and C. H. Young, Indianapolis, treasurer.

THE untimely death of Dr. George E. Mills was a severe blow to the city of Evansville. To Doctor Mills must go considerable of the credit for the success of the Boehne Tuberculosis Hospital in the city of Evansville. Doctor Mills had also established a number of successful chest clinics in the surrounding communities. It is only occasionally that a physician is successful as an organizer and as a physician. Doctor Mills is survived by a wife and two small children.

THE regular monthly clinic program of the Welborn Hospital Clinic was held Wednesday, May 15, at 8:00 p. m.

The following program was presented: Report of an interesting case, Dr. J. Y. Welborn; The Diagnosis and Treatment of Gall-Bladder Disease, Dr. W. R. Davidson; moving picture, "Tissue Repair"; Radiographic Diagnosis of Gall-Bladder Disease, Dr. K. T. Meyer; Tuberculosis of the Genito-Urinary Tract, Dr. J. W. Visser.

THE Sixth District Medical Society held its meeting at the Strand-Alcazar, Shelbyville, May 23. Dr. Ernest Rupel, of Indianapolis, presented a paper on "Some Phases of Conservation of the Genito-Urinary Organs." In the afternoon Dr. A. M. Mendenhall presented a paper on "Some Newer Things in Obstetrics"; Dr. C. L. Rudesill talked on "The Treatment and Complications of Diabetes Mellitus" and Dr. H. S. Hatch presented a paper on "Dust-Borne and Pollen-Borne Diseases."

IN compliance with the provisions of the Constitution and By-Laws of the United States Pharmacopoeial Convention, the president of the convention invites the several bodies entitled to representation therein, to appoint delegates to the Eleventh Decennial Convention to meet in Washington, D. C., on May 13, 1930. Lyman F. Kebler, M.D., of 1322 Park Road, N. W., Washington, D. C., is secretary of the United States Pharmacopoeial Convention for 1930. Reid Hunt, M.D., of Boston, is president for the 1930 convention.

THE Indianapolis Medical Society held its regular weekly meeting May 7th, at the Athenaeum, the program consisting of case reports presented by Doctors F. C. Walker, William Wishard, Jr., A. A. Thomas, Harry J. Weil,

Matthew Winters, John Wheeler, J. E. Wyttensbach, George Wood, and William N. Wishard, Sr. The May 14th meeting was held at St. Vincent's Hospital in the Nurses Home Auditorium. This was a combined meeting of the St. Vincent Staff Society and the Indianapolis Medical Society.

DR. W. D. HAGGARD, of Nashville, Tenn., delivered an address before the annual meeting of the St. Mary's Hospital Staff, Tuesday, May 21, on the "Diagnosis and Treatment of Goiter". More than 100 physicians were in attendance. Dr. J. C. McClurkin, president of the staff, was presented a silver tea service by the members of the staff of St. Mary's Hospital, as a testimonial of appreciation for his work as president and his untiring efforts to make St. Mary's Hospital one of the best in the tri-state area. Doctor McClurkin has been in the practice of medicine for fifty years.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Bismarsen.

Ciba Co., Inc.:

Digifoline-Ciba.

Digifoline-Ciba Liquid.

Ampules Digifoline-Ciba Solution, 1 cc.

Ampules Digifoline-Ciba Solution, 5 cc.

Tablet Digifoline-Ciba.

Parke, Davis & Co.:

Diphtheria Toxoid.

E. R. Squibb & Sons:

Insulin-Squibb, 80 units, 10 cc.

Winthrop Chemical Co., Inc.:

Tablets Theocin Soluble, 2½ grains.

A Frenchman, being troubled with gout, was asked what difference there was between that and rheumatism. "One very great difference," replied Monsieur. "Suppose you take a vise, put your finger in, you turn the screw till you can bear him no longer. Zat is rheumatism. Den 'spose you give him one turn more. Zat is gout!"

"What made you oversleep this morning?"

"There are eight in the house but the alarm was only set for seven."

"Are you here for manslaughter?" the warden asked the prisoner.

"No, sir."

"Aren't you? This card says you are here for manslaughter."

"Yeah, that's what that fool judge said. But I told him twice it was a woman I croaked."

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

April 12, 1929.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., Chairman; C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

The minutes of the meeting held April 4 read, corrected and approved.

The release, "So-Called Cancer Cures," read, further corrected, and approved for publication Saturday, April 20.

The release, "Open Season for May Queens," approved for publication Saturday, April 27.

The radio release to be broadcast under the direction of the Marion County Tuberculosis Association follows: April 13—"The Importance of Medical Supervision of Child Contact Patients of Tuberculosis" by Secretary of Indiana State Board of Health.

A letter was received from the secretary of the American Medical Association in answer to a letter from the Bureau of Publicity outlining and giving the facts concerning the suggested Lions Club baby clinic. The letter said in part:

"I have your letter of April 8 advising me of the action of the Bureau of Publicity of the Indiana State Medical Association, concerning a communication received from J. J. Russell, representing the National Lions Club.

"In my own opinion, the free baby clinics, as generally put on, do just about as much harm as they do good, and often they do more harm. I do not believe that any "hurrah" methods, such as are generally used by lay organizations in carrying out spasmodic programs, ever accomplish very much that is worth while. On the other hand, I think I have seen distinctly harmful results follow the application of such methods, quite aside from any direct effects that might reflect to the disadvantage of the medical profession or any of its members.

"One great objection I have to these free clinics as they are usually put on is that they tend to create in the minds of the public the suspicion that the medical profession generally is incompetent and that only the very few physicians who are called in to operate the clinics are capable of rendering satisfactory medical service. It is my earnest conviction that anything that tends to destroy the confidence of a community in its own medical profession is harmful to the community.

"I am further of the opinion that no clinic of any sort should be operated in a community without the approval of the component county medical society concerned."

Instructions were given the executive secretary to write to the secretary of the American Medical Association stating that the Bureau was appealed to by the local Lions Club and the president of the local medical society for its opinion and approval concerning the proposed baby clinic. The letter was to make clear the fact that the Bureau does not assume any authority in the matter further than an expression of its opinion.

The Bureau approved the report of its representative who was present at the Third Annual Conference on Public Health held at Chicago March 29 and 30 under the direction of the American Medical Association. The report was to be sent to the editor of THE JOURNAL with the recommendation that it be printed in THE JOURNAL.

The following letter was received some time ago from the secretary of the Grant County Medical Society:

"At the request of the County Society I am attempting to collect some data concerning patients sent from this county to the University Hospitals. At the Auditor's office here I can obtain only the

names of patients sent to the James W. Riley Hospital together with the number of days spent there and expense to the county; no information concerning Robert Long or Coleman Hospitals. To whom shall I go for more information concerning types of cases sent to all of these hospitals during the past two years and cost to Grant County?

"As I understand our local physicians I do not feel that there is opposition to the state hospitals—rather a desire to know whether or not some patients are being sent to Indianapolis who might be cared for here, while others who would be more properly treated there remain at home."

A copy of this letter was sent on February 19 to the administrator of the Indiana University Hospitals. The answer of the administrator follows:

"I am returning herewith the report of patients sent to the James Whitcomb Riley Hospital during the years 1927 and 1928. I have taken the liberty of correcting two figures, and have added to the list the patients admitted to the Riley Hospital during the months of October, November, and December. I am enclosing also a list of patients treated in the Robert W. Long and Coleman Hospitals for the years 1927 and 1928. I hope this information may be of service to you."

A preliminary draft of the report of the Bureau on the Cost of Medical Care was presented to the Bureau. The final draft will be presented at the next meeting.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole April 26, 1929.

BUREAU OF PUBLICITY

April 26, 1929.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., Chairman; C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held April 12 read, corrected and approved.

The release, "Vacation and Typhoid Vaccination" read, corrected, and approved for publication Saturday, May 4.

Radio releases to be broadcast under the direction of the Marion County Tuberculosis Association follows:

April 20—"The Prevention of Heart Disease."

April 27—"Cancer."

Request received from superintendent of City Hospital that the broadcast on May 11 be upon National Hospital Day which comes May 12. The Bureau approved this request on condition that the general rules which govern broadcasts by the Bureau be complied with.

The following letter was received from the secretary of the American Medical Association:

"I am very glad indeed to have your letter of April 15.

"It is a splendid thing that county medical societies are working in such close cooperation with the Bureau of Publicity of the Indiana State Medical Association, and it is especially encouraging that matters of the kind referred to in our recent correspondence are being referred to the Bureau for its careful consideration and for opinion and advice. I think the Bureau of Publicity is doing splendid work and, for all that I can hear about it, its work is generally appreciated in the state."

A letter was received from the secretary of the State Board of Health stating that Shelby County, Indiana, was being considered by the Committee on the Cost of Medical Care as a suitable rural county in Indiana for a complete survey of medical facilities. The letter states that the secretary of the Research Staff of the Committee on the Cost of Medical Care says that it is desirable to have an invitation from the Shelby County Medical Society and asks for suggestions as to the best method

of obtaining such invitation. The Bureau of Publicity expressed its highest approval of the selection of Shelby County by the Committee on the Cost of Medical Care and authorized a letter to be written to the secretary of the State Board of Health expressing this approval and the hearty cooperation of the Indiana State Medical Association in this undertaking.

The Bureau of Publicity authorized the secretary to write a letter to the editor of *The Indianapolis Medical Journal*, thanking him for carrying in such complete style an account of the March meetings of the Bureau in the April number of this publication.

Letter was received from the magazine *Time* enclosing a questionnaire concerning the financial costs of obtaining a medical education and financial returns by Indiana physicians. One member of the Bureau was assigned to answer this questionnaire.

The final draft of the report prepared by one member of the Bureau, requested by the Committee on the Cost of Medical Care, received the approval of the Bureau.

The following bills were approved for payment:

The Bailey Office Supply	\$15.00
A. B. Dick Company	4.00
	<hr/> \$19.00

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole May 3, 1929.

BUREAU OF PUBLICITY

May 3, 1929.

Meeting called to order at 5:00 p. m.

Present: Wm. N. Wishard, M.D., Chairman; C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held April 26th read, corrected and approved.

The release, "National Hospital Day," read and approved for publication Saturday, May 11.

Radio release, prepared by the superintendent of the Indianapolis City Hospital, to be broadcast May 11, "National Hospital Day."

The following request was received for speaker:

May 15—Kiwanis Club, Muncie. Noon luncheon. Talk on Surgery.

The member of the Bureau to whom was assigned the duty of answering the questionnaire of the magazine *Time* concerning the financial cost of medical education and the financial returns of Indiana physicians reported that he had not yet completely collected his data.

The following letter was received from the Marion County Tuberculosis Association:

"The Board of Directors of the Marion County Tuberculosis Association has asked me to express its thanks to the Indiana State Medical Society for permitting us to use the time allowed them over WFBM during the month of April to broadcast in connection with the Early Diagnosis Campaign. We are very grateful for this opportunity and feel that some good was accomplished."

The following is a letter in part received from a secretary of one of the county societies:

"A question has arisen in our local society as to what constitutes advertising and thus becomes unethical practice for a reputable physician."

The Bureau instructed the secretary to write the following letter:

"In answer to your request for a statement as to what is ethical advertising, it would appear that advertising of any kind is unethical except insofar as it conveys information as to the name and location of the office of a physician together with a statement of his office hours. In addition, it is allowable for a physician to state his specialty if he so desires. This, however, would seem to be a matter

of personal taste and it is not forbidden under the interpretation that the Bureau of Publicity places upon the Code of Medical Ethics of the American Medical Association, a copy of which is enclosed.

"Giving the permitted information referred to above in so-called display advertising would, of course, raise the question as to its propriety.

"Further answering your question, no distinction can be made between the form of advertising indulged in by members of a society and in the form of advertising of applicants for membership so far as ethical and unethical advertising are concerned. In the Principles of Medical Ethics, published by the American Medical Association, Chapter II, Section 4, pages 7 and 8, deals with advertising. It says in part:

"Solicitation of patients by physicians as individuals, or collectively in groups by whatever name these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical institutions from a legitimate advertisement of location, physical surroundings and special class—if any—of patients accommodated. . . . The publication or circulation of ordinary simple business cards, being a matter of personal taste or *local custom*, and sometimes of convenience, is not per se improper. *As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards.*"

The following bills were approved for payment:

Typewriter Service Company.....	\$ 3.75
Central Press Clipping Service.....	6.75

\$10.50

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole May 10, 1929.

BUREAU OF PUBLICITY

May 10, 1929.

Meeting called to order at 4:45 p. m.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held May 3 read and approved.

The release, "Cracked Toes", read, corrected, and approved for publication Saturday, May 18.

The following radio release was approved:

May 18—"Cracked Toes."

The following letter was received from the magazine *Time*, and the secretary was instructed to place this in the hands of the committeeman who is compiling the data for the questionnaire desired by this magazine:

"We have your letter of April 20, in answer to our recent inquiries as to costs of medical education, etc.

"We shall be grateful for any information which the Bureau of Publicity of the Indiana State Medical Association may be able to give us.

"Thank you for your interest and courtesy in this matter."

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole May 17, 1929.

BUREAU OF PUBLICITY

May 17, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; J. A.

MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary. Guests: David Ross, M.D., chairman, Executive Committee; Wm. F. King, M.D., secretary, Indiana State Board of Health; Allon Peebles of the Committee on the Cost of Medical Care, Washington, D. C.

Minutes of the meeting held May 10 read and approved.

The release, "Prevent Hay Fever Now," read, corrected, and approved for publication Saturday, May 25.

The following radio release was approved:

May 25—"Vacation and Typhoid Vaccination."

Letter received from the committee secretary of the Indianapolis Council of Social Agencies enclosing a bulletin on Camp Sanitation, asking for the endorsement of the bulletin by the Bureau of Publicity. This bulletin was to be put in the hands of the operators of the eight summer camps around Indianapolis. With minor suggestions the Bureau approved of the bulletin and instructed the secretary to write a letter to the Indianapolis Council of Social Agencies containing the suggestions and also voicing the Bureau's approval.

The following report of a medical meeting was received:

May 15—Kiwanis Club, Muncie, Ind. "The Relation of Surgery to Public Health."

A representative of the Committee on the Cost of Medical Care together with the secretary of the State Board of Health attended the Bureau meeting. The representative who comes from the Research Division of the Committee on the Cost of Medical Care, explained in detail the facts concerning the survey that is to be made in Shelby County. This survey is to take from eight to ten weeks and is to be as thorough and complete as is humanly possible.

The Bureau expressed its appreciation of the comment in the May number of *The Indianapolis Medical Journal* in which the work of the Bureau for April and May was in part reviewed.

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole May 24, 1929.

INDIANA STATE MEDICAL ASSOCIATION WOMAN'S AUXILIARY

The Executive Board of the Woman's Auxiliary of the Indiana State Medical Association was entertained at luncheon, May 5th, at the Hotel Lincoln, Indianapolis, by the president, Mrs. W. R. Davidson, Evansville. The executive secretary of the Indiana State Medical Association, Mr. Thomas Hendricks, was the speaker. Those attending were Mrs. Edgar Kiser, Mrs. Frank W. Cregor, Mrs. David Ross, and Mrs. H. L. Foreman, of Indianapolis; Mrs. Everett Zaring, Mrs. Clarence La Bier, and Mrs. O. F. Alexander, of Terre Haute; Mrs. E. M. Conrad, Anderson; Mrs. A. T. Kemper, Muncie; Mrs. Samuel Kennedy, Shelbyville, and Mrs. J. H. Hare, Evansville. The program for the meeting of the Auxiliary at Evansville and the perfection of the organization were the matters under discussion.

MRS. W. R. DAVIDSON.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The dinner meeting of the St. Joseph County Medical Society was held April 24, 1929, at the Oliver Hotel.

The program consisted of the National Red Cross motion picture, "The Doctor Decides", which is being given in connection with the annual fight against tuberculosis. This was followed by a joint paper by Dr. Joseph Brenneman, of Chicago, and his associate, Doctor Bigler.

Doctor Brenneman took up the diagnosis and treat-

ment of tuberculosis in the infant. He stressed the importance of exposure in diagnosis, the lack of local manifestations, as in the adult, except in meningitis and more extensive manifestations in infants in peritonitis. He believed every case of phlyctenular conjunctivitis or keratitis a manifestation of tuberculosis and bases this belief on experiments with rabbits, when phlyctenules were produced by tubercular inoculations. He took up more specifically meningeal, peritoneal, and pulmonary tuberculosis, depending mostly for diagnosis on history of exposure and von Pirquet reaction. He did not think the ordinary x-ray as a rule could be depended upon for a correct diagnosis as these pictures were seldom followed up by autopsies to prove or disprove the condition. His treatment consisted in rest, food and air.

Doctor Bigler followed with thirty lantern slide pictures of x-ray plates taken of children who had been clinically diagnosed as tubercular. These pictures were taken when child first consulted them, during the illness, again just before death, and at the autopsy, giving some unusual shadows of primary foci and other changes.

The papers were discussed by Doctors Stoltz, Darden, Knode and Clark.

The St. Joseph County Medical Society held its family night dinner at the Country Club May 1, 1929. In the afternoon the men played golf while the ladies played cards. Dinner was served to 120 members and guests at 7 p. m.

The Doctors' Trio—composed of Doctor Milo Miller, cello; Doctor Bosenbury, piano, and Doctor Samson, violin, entertained with Chamber music, giving the selections:

Ave Maria Stella	Grieg
Minuet	Beethoven
Louis XIII	Gabotte
Melodien F	Rubenstein
Mignonette	Godard

The rest of the evening was spent in dancing.

The final meeting until fall of the St. Joseph County Medical Society was held May 7th in the Public Library.

Doctors Green and Knode presented an interesting case of scurvy in a child of eight months. The case at first was complicated by a middle ear abscess, later by abscesses in other locations. The susceptibility of under nourished children to infections of all kinds was pointed out.

The paper of the evening was given by Dr. J. E. McMeel on "Diabetic Diets". Doctor McMeel gave four points which one should strive to accomplish by the diet; sparing the damaged pancreas; keeping the patient's weight about 10 percent below normal; giving a wide diversity of food, and enabling the patient to resume usual occupation. He outlined the normal diet, giving the ratio of carbohydrates, proteins and fats necessary, and thought one should tend toward rather than deviate from the normal diet. He spoke of the three diverse diabetic diets—Joslin's Conservative Diet, Sanson's High Carbohydrate Diet, and Newburgh and Petren Low Carbohydrate, Low Protein and High Fat Diet. He discussed the causes of acidosis and in conclusion urged that diabetics be given the correct ratio of carbohydrates, proteins and fats by weight and not by guess.

The paper was discussed by Doctors Sensenich, M. W. Lyon, Giordano and McMeel.

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

VANDEBURGH COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Vanderburgh County Medical Society was held at the Deaconess Hospital, Tuesday, May 14, at 8:00 p. m.

It was decided that a committee be appointed by the president, Dr. H. C. Ruddick, to investigate the advisability of establishing an ambulatory poor clinic as outlined by Dr. Malcolm Harris, president-elect of the American Medical Association, at the meeting of the Councilors and Secretaries of the County Medical Societies held at Indianapolis.

Dr. G. C. Johnson, chairman of the general arrangement committee, presented a report of the committee on the expenses of conducting the state meeting to be held here in Evansville in September. A special assessment is to be levied against every member of the society to defray the necessary expenses.

A cardiovascular clinic was presented with Dr. Shelby Wishart as director. Dr. W. C. Caldwell spoke on cardiac angina. Dr. Wishart presented a patient, age 37, pregnant for four months, and a primapara, with moderately extensive myocardial changes. The question of submitting the patient to a curettage or permitting her to go on to term was thrown open to discussion by the society. Dr. Wishart later read letters received from Dr. J. B. DeLee, Chicago Lying-In Hospital, Chicago, Ill.; Dr. J. W. Williams, Johns Hopkins University, and Dr. R. Peterson, University of Michigan, as to what their plan of procedure would be in this case.

Respectfully submitted,

K. T. MEYER, M.D.,

Secretary.

OWEN COUNTY MEDICAL SOCIETY

The Owen County Medical Society held a dinner meeting at Canyon Inn, McCormicks Creek, State Park, Tuesday evening, May 21, 1929. Dr. David R Ulmer, of Terre Haute, gave a most interesting and practical talk on "The Treatment of Fractures of Small Bones." A large percentage of those present took part in the discussion which followed.

It was the first meeting of the society in over ten years. Not the least part of our success was due to the large number of visiting physicians from the neighboring counties of Monroe, Clay and Sullivan.

ROBERT H. PIERSON, M.D.,

Secretary.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASE

MONTHLY REPORT, MAY, 1929

There are 517 Health Officers in the state. Twenty-six of these officers represent two or more health units, only 47.3 percent reported during the month. Every Health Officer is required by a ruling of the State Board of Health to report whether he has any cases of disease to report or not, and if no cases of communicable diseases have occurred in his jurisdiction that fact should be reported. No health department, state or local, can effectively prevent or control diseases without the knowledge of when, where and under what conditions, cases are occurring. Every community can largely determine its own morbidity or sick rate. The reports from the Health Officers of the State during the month show an increase over the previous month in the number of cases of the principal diseases, except typhoid fever and scarlet fever.

Typhoid Fever shows a decline over the previous month, twenty-one cases were reported; twenty-seven cases preceding month. Only two cities in the state reported cases, namely, Fort Wayne and Hammond, ten cases and one case, respectively. Ten cases were reported from the rural district, seven cases from Vanderburgh county and one case each from DeKalb, Gibson and Vermillion counties. May is a light month for typhoid cases. The estimated expectancy was twenty-two cases. The estimated expectancy is based on the experience of the last seven years. Typhoid fever is a summer and late autumn disease due, no doubt, to insect and human carriers. Swat the fly early.

Measles was the most prevalent disease reported during the month, 2,375 cases; 1,929 in April. May of last year reported 220 cases. April is the peak month for measles, no doubt the cold rainy weather of the month kept the prevalence of the disease. Measles will subside when warm weather arrives. The estimated expectancy for May was 1,989 cases, for April 2,487 cases.

Scarlet Fever shows a decline over the preceding month, 1,090 cases as against 1,819. The disease is due for a decrease. The normal average for May is 399 cases. The backward spring, no doubt, has helped the disease to continue. Scarlet fever is a cold weather disease. It is scarcely known in the tropics.

Smallpox shows near the normal average for May, 322 cases; previous month 205 cases; corresponding month preceding year 454 cases. The estimated expectancy was 418 cases. The school authorities of Lafayette, Indiana, stopped an epidemic of smallpox in the schools this year with compulsory vaccination, 98 percent of the school children that did not have the disease were vaccinated, no deaths nor illness due to vaccination.

Diphtheria is holding stationary so far as the previous month is concerned. Fifty cases each for April and May. This shows a substantial reduction. The normal average for the period is 102 cases. If immunization was compulsory perhaps the slogan, "No diphtheria by the end of 1930," would be a reality.

Tuberculosis shows almost a 50 percent increase as compared with the previous month. Three hundred six cases in May and 159 cases in April; last year same date 247 cases. This is one disease that an increase of cases reported is of interest. It does not indicate that tuberculosis is on the increase, but that more physicians are reporting their cases. The physicians of the state do not report their cases of tuberculosis to the health Officer of their jurisdiction but report directly to the Collaborating Epidemiologist, U. S. Public Health Service, State Board of Health. A franked post card is furnished to every practicing physician in the state, so that the physician should be put to the least possible trouble. The State Anti-Tuberculosis Law, Chapter 55, Acts 1915 was approved March 5, 1915, makes it "the duty of every practicing physician in the state of Indiana to report the name and address of every person known by him to be infected with tuberculosis at least five days after such fact comes to the knowledge of the physician." There were 2,314 deaths from tuberculosis (all forms) in the state last year, and 2,081 morbidity cases reported. It is generally conceded among tuberculosis workers that where there is one death there are nine active cases. Therefore, there are 20,826 active cases of tuberculosis in Indiana. Let physicians take notice.

Cerebro-Spinal Meningitis—The state is comparatively free from this disease, only four cases this month; three cases the preceding month; same date last year two cases. First four months this year sixteen cases were reported. The disease is epidemic in a number of states. Estimates from the U. S. Public Health Service reports show for the first three months of this year, Michigan, 387 cases; Missouri, 263 cases; Illinois, 213 cases; California, 226 cases; state of Washington, 121 cases; 100 cases each from Colorado, Utah and Arizona; state of New York, 441 cases. Mortality from this disease is very heavy. Direct contact with infected persons or carriers or freshly soiled articles by excrements from the respiratory organs of the infected persons are the means of transmission.

The name and number of diseases reported during the month not mentioned above are as follows: Chickenpox, 303; whooping cough, 212; influenza, 13; pneumonia, 13; mumps, 17; one case of poliomyelitis in Scott county, and one case of septic sore throat in Porter county.

During the month the director assisted the director of visual education to put over a health week campaign in Lafayette and West Lafayette under the auspices of the Y.M.C.A. of Lafayette. Spoken and visual messages of

health were given to all of the public and parochial schools of the two cities, seventeen in number. The director had the unique experience of speaking on a health topic, consecutively to the six luncheon clubs of Lafayette during the week. He also spoke to the men of the Ross Gear works on the prevention and control of the venereal diseases.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service.

ELEVENTH INDIANA COUNCILOR DISTRICT MEDICAL ASSOCIATION

May 17, 1929.

At the District meeting held at Huntington May 16 Dr. Nettie B. Powell, of Marion, was elected chairman for the ensuing year and Dr. O. G. Brubaker, of North Manchester, was re-elected secretary and treasurer.

The next meeting will be held at Wabash in October, 1929.

The program as printed was carried out with the exception that Doctor Echkar's paper was carried over to our next meeting in order to give more time to discuss Doctor Smithies' subject.

Doctor Richardson, our necrologist, reported that the following doctors of the district had passed on during the year:

C. L. Thomas and A. L. Palmer, Logansport; Frank L. Priest, Marion; M. C. Cloakey and A. H. Shaffer, Huntington; C. H. Brodbeck, Roann; E. J. Cripe, North Manchester.

Visitors from outside the Eleventh District were Doctors J. C. Burkle, Lafayette; A. E. Stinson, Rochester; Geo. B. Morris, Bluffton; J. M. Pulliam, Fort Wayne; E. M. Van Buskirk, Fort Wayne; A. J. Sparks, Fort Wayne; A. C. McDonald, Warsaw; C. Norman Howard, Warsaw; W. B. Siders, Warsaw.

Very respectfully,

O. G. BRUBAKER, M.D.,
Secretary.

TENTH INDIANA COUNCILOR DISTRICT MEDICAL ASSOCIATION

The Tenth District Medical Society held its semi-annual meeting at the Mercy Hospital, at Gary, Indiana, May 15th, 1929.

The morning program consisted of an operative clinic. F. C. Walker, M.D., professor of gynecology at Indiana University School of Medicine, did the operative work while Dr. McCallom, of Eli Lilly & Co., administered the new intravenous anaesthesia "Sodium Amytal" manufactured by Eli Lilly & Co. The surgery was overcrowded showing the manifestation of unusual interest. Following the clinic a luncheon was served at the hospital.

At the business session it was decided that the next meeting would be held in Valparaiso next September. Dr. Evans, of Gary, resigned as councilor and Dr. Shanklin, of Hammond, was unanimously elected to fill his unexpired term.

The scientific program in the afternoon consisted of two excellent papers, one by Dr. F. C. Walker, Indianapolis, on "Precancerous Lesions of the Cervix." Dr. Walker laid particular stress on the importance of repairing cervical lacerations immediately following delivery as an abortive measure in preventing carcinoma in later years. The other paper, or rather discussion, by Doctor McCallom, of Indianapolis, discussed the anaesthetic properties and application of "Sodium Amytal."

At 6.50 p. m. a dinner was held at the Gary Hotel which was followed by an unusually interesting address on "The Constitution of the United States" by Attorney L. L. Bomberger, of Hammond, Ind.

H. G. COLE, M.D.,
Secretary.

CORRESPONDENCE

MEDICAL FEES FOR THE MIDDLE CLASSES

Warsaw, Ind., May 29, 1929.

Editor THE JOURNAL:

The recent commotion in one of our large cities with regard to a certain health institute should command attention and thought of the issue and principles involved. My apology for writing at this time would be that some of us may be unaware of the recent agitation by prominent laymen, the press, and many members of the medical profession concerning an economic abuse of the middle classes by some few physicians. The making of such an accusation concerning bad conduct of physicians, if applied generally would do a great injustice to the profession as a whole and of course would be utterly untrue. That some are guilty should be acknowledged. The burden, of course, the guilty must carry, and whether wealthy philanthropists or state medicine will assume the role of the private physician in the near future will rest with them and them alone. Far seeing men in the profession are taking the matter seriously and are endeavoring to devise means by which people of moderate means can be served for fees which they can afford, and at the same time compensate for services which otherwise those people would be compelled to forego.

To the physicians in Indiana the complaint probably will appear unreasonable, and no doubt they will feel that they have been accused of something wholly undeserved. That the movement started in the large cities would indicate that there the abuse is most prevalent. In the attempt to correct and meet the situation some think that through the agency of the A. M. A., the methods of correction should be extended to include the whole profession. This they wish to do within the ethical members and in an ethical manner. Whether or not the methods which are suggested finally will be adopted and found practical, of course they can give no assurance. They believe a careful attempt should be undertaken.

The plan offered as a solution of the problem is that all the community doctors combine their efforts at stated intervals, and each man in his turn give professional services at a cost which the people can afford and can pay for. I suppose that this will appeal to some like the "Noble Experiment" which we have heard so much about in connection with another issue. Some may even brush it aside as being ideal and fanciful, but not practical. Let us remember that the men who are suggesting these means are not only idealists but have proven themselves practical by their results. Whether or not this scheme will prove satisfactory in practice remains to be seen, but we should approach it in a spirit of sympathy, remembering that something always comes out of a deserving attempt which ever way it eventually is solved. Let us also remember that the medical profession has a moral contract to care for the sick, and, moreover, to make a deserving attempt to prevent illness. Should the profession fail, others will assume the burden, and eventually the state will step in and we shall have state medicine which is worse for the people and for the physician.

The storm has barely reached Indiana but it is blowing hard in our neighborhood. Shall we close our eyes like the saloons did and wait for the results—or shall we clean our house, and when the inspector comes we shall be found not wanting?

A. C. McDONALD, M.D.,
President-elect, Indiana State
Medical Association.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Further information concerning these books will be supplied on request.

Books received since May 1, 1929:

PHYSICAL THERAPEUTIC TECHNIC. By Frank Butler Granger, M.D., late physician-in-chief, Department of Physical Therapeutics, Boston City Hospital; Director of Physiotherapy, U. S. Army; instructor of Physical Therapeutics, Harvard Medical School. Foreword by William D. McFee, M.D., Boston, Mass. 417 pages, with 135 illustrations. Cloth. Price \$6.50. W. B. Saunders Company, Philadelphia and London, 1929.

PRINCIPLES OF PATHOLOGY. For Practitioners and Students. By H. D'Arcy Power, M.D., F.R.P.S., Professor of Pathology, College of Physicians and Surgeons, San Francisco, and William W. Hala, M.D., Assistant Professor of Pathology, Long Island College Hospital, Brooklyn, N. Y. 787 pages, with 298 illustrations, many in color. Cloth. D. Appleton and Company, New York and London, 1929.

DIAGNOSTIC METHODS AND INTERPRETATIONS IN INTERNAL MEDICINE. By Samuel A. Loewenberg, M.D., F.A.C.P., Assistant Professor of Clinical Medicine, Jefferson Medical College; Assistant Physician to the Jefferson Hospital. 1032 pages, with 547 illustrations, some in colors. Cloth. Price \$10.00. F. A. Davis Company, Philadelphia, 1929.

EDEMA AND ITS TREATMENT. By Herman Elwyn, M.D., Assistant Visiting Physician to Gouverneur Hospital, New York City. 182 pages. Cloth. Price \$2.50. The MacMillan Company, New York, 1929.

THE SURGICAL CLINICS OF NORTH AMERICA. Issued serially, one number every other month. Volume 9, number 2. Chicago number, for April, 1929. 243 pages, with 70 illustrations. Per clinic year, paper \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia and London, 1929.

PRACTICAL CHIROPODY. By E. G. V. Runtig, a founder and the first president of the Incorporated Society of Chiropractors. Third edition. 200 pages. Cloth. Price \$3.00. The C. V. Mosby Company, St. Louis, 1929.

THE TONSILS AND ADENOIDS AND THEIR DISEASES; Including the Part They Play in Systemic Disease. By Irwin Moore, M.D., C.M. (Edin.) Late honorary surgeon to the London Throat Hospital, and also to the Hospital for Diseases of the Throat, Golden Square, London, W. 295 pages. Cloth. Price \$6.50. The C. V. Mosby Company, St. Louis, 1928.

DISEASES OF THE THYROID GLAND. By Arthur E. Hertzler, M.D., Surgeon to the Halstead Hospital. With a chapter on Hospital Management of Goiter Patients by Victor E. Chesky, M.D., Associate Surgeon to Halstead Hospital. Second edition, entirely rewritten. 286 pages. Cloth. Price \$7.50. The C. V. Mosby Company, St. Louis, 1929.

DISEASES AND DEFORMITIES OF THE SPINE AND THORAX. By Arthur Steindler, M.D., F.A.C.S., Professor and Head of the Department of Orthopedic Surgery of Iowa State University Medical School, Iowa City, Iowa. 573 pages, with 76 plates. Cloth. Price \$12.50. The C. V. Mosby Company, St. Louis, 1929.

SURGICAL PATHOLOGY. By William Boyd, M.D., Professor of Pathology, University of Manitoba, Winnipeg, Canada. Second edition, revised and reset. Octavo of 933 pages, with 474 illustrations and 15 colored plates. Cloth. Price \$11.00. W. B. Saunders Company, Philadelphia and London, March, 1929.

MANUAL OF DISEASES OF THE NOSE, THROAT AND EAR. By E. B. Gleason, M.D., LL.D., Professor of Otolaryngology, Medico-Chirurgical College Graduate School of Medicine, University of Pennsylvania. Sixth edition,

thoroughly revised. 617 pages, with 262 illustrations. Cloth. Price \$4.50. W. B. Saunders Company, Philadelphia and London, 1929.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

LENIGALLOL.—TRIACETYLPYROGALLOL.—Lenigallol is said to be nonpoisonous and nonirritating, but it produces a mild and painless corrosive effect by the gradual liberation of pyrogallol. It is used as a substitute for pyrogallol in psoriasis, lupus, acute and subacute eczema of children and other skin diseases. E. Bilhuber, Inc., New York.

SOLUTION BISMUTH SODIUM TARTRATE-SEARLE, 1.5 PERCENT.—An aqueous solution containing bismuth sodium tartrate-Searle (*Journal A. M. A.*, June 30, 1928, p. 2103) 0.015 Gm., benzyl alcohol 0.02 Gm., and sucrose 0.25 Gm., in one cc. G. D. Searle & Co., Chicago. (*Journal A. M. A.*, April 6, 1929, p. 1181.)

MAGNESIA-MINERAL OIL (25) HALEY.—A mixture composed of liquid petrolatum, U. S. P., 1 part by volume magnesia magma, U. S. P., 3 parts by volume. It is used as a lubricant in the intestinal tract for promoting evacuation of the bowel and as an antacid for the gastro-intestinal canal. The Haley M-O Co., Inc., Geneva, N. Y.

SULPHARSPHENAMINE-SEARLE.—A brand of sulpharsphenamin-N.N.R. (New and Nonofficial Remedies, 1928, p. 81). It is supplied in 0.4 Gm., 0.5 Gm. and 0.6 Gm. ampules. G. D. Searle & Co., Chicago.

DIPHThERIA TOXIN-ANTITOXIN MIXTURE (DIPHThERIA PROPHYLACTIC).—A diphtheria toxin-antitoxin mixture (New and Nonofficial Remedies, 1928, p. 366), each cc. representing 0.1 L+dose of diphtheria toxin neutralized with the required amount of antitoxin. It is marketed in packages of three 1 cc. vials, in packages of one 15 cc. vial; in packages of one 30 cc. vial, and in packages of thirty 1 cc. vials. National Drug Co., Philadelphia. (*Journal A. M. A.*, April 20, 1929, p. 1349.)

PROPAGANDA FOR REFORM

NATIONAL RADIUM EMANATOR AND SAUBERMANN RADIUM EMANATION ACTIVATOR OMITTED FROM N. R. R.—The National Radium Emanator, marketed by the National Radium Products Co., and the Saubermann Radium Emanation Activator, marketed by Radium Limited, are appliances for impregnating drinking water with radon (radium emanation) in dosages ranging from 50,000 to 200,000 mache units in the case of the former, and 10,000 to 100,000 mache units in the case of the latter. The acceptance of both these products expiring with the close of 1928, the firms were asked to submit evidence in favor of their continued inclusion in New and Nonofficial Remedies. The National Radium Products Co. submitted an advertising circular which was in effect an indirect advertisement to the public and which made claims far in excess of those previously permitted by the Council. Radium Limited failed to respond to requests for the current advertising. In consideration of the claims made for the first apparatus and of the failure of the second firm to submit the present advertising, and because no further acceptable evidence has become available, the Council on Pharmacy and Chemistry voted to omit these products from New and Nonofficial Remedies and not to accept further apparatus for the activation of drinking water until convincing evidence for the therapeutic value of the internal use of radon becomes available. (*Journal A. M. A.*, April 6, 1929, p. 1181.)

ORAL ADMINISTRATION OF TYPHOID VACCINE.—Recently two investigators have observed the effect of oral

administration of typhoid vaccine on antibody formation. Using the triple vaccine they found that 88.5 percent of the subjects developed agglutinins for typhoid and a lesser number for paratyphoid bacilli. This is compared to 80 percent who, according to the literature, developed agglutinins after subcutaneous inoculation and to 90 to 95 percent who show a positive Widal reaction after suffering from the disease. The administration of bile before the vaccine increased the percentage and shortened somewhat the latent period in which agglutinins are developed. This interval, the investigators find, is no longer when the oral method is used than it is for the more orthodox method. Complement fixations and precipitins were tested in a smaller number of persons and were found to be present more frequently than in the case of subcutaneous inoculation. These results show a closer similarity in antibody formation to the immunity reaction of typhoid on the part of oral than of subcutaneous administration. However, clinical resistance to disease may not correspond accurately with the development of agglutinins or precipitins. A method so well proved as subcutaneous inoculation against typhoid will not be lightly abandoned. (*Journal of the A. M. A.*, April 6, 1929, p. 1185.)

ACTION OF MORPHINE ON THE ALIMENTARY TRACT.—A better understanding of the action of morphine on different parts of the alimentary canal was obtained by animal experiments which showed that the most constant and lasting effect of morphine on gastric motor activity is a decrease in the muscular tone of the stomach wall which outlasts the decrease in amplitude and frequency of peristaltic waves. Diacetylmorphine, codeine, papaverine and narcotine produce similar effects. In the colon the pronounced effect is a marked increase in tone, accompanied by more continuous peristaltic activity. On the basis of these experiments the constipating action of opium may be ascribed to the following: Relaxation of the stomach wall and decrease in peristalsis of the pyloric antrum decrease the rate of discharge of gastric contents into the duodenum. Consequently the stomach contents are distributed in small quantities throughout the small intestine, and this would lead to more complete digestion and absorption. The increase in tone and peristaltic activity of the small intestine would produce more even distribution of the content and further increase absorption. In the colon, the marked increase in tone, serves to hold back the material from the sigmoid and rectum, facilitates absorption, and renders the residue drier. These factors seem to explain the constipating action of opium. The antidiarrheic action of the opium alkaloids may be explained by the increase in tone of the small and large intestine. The increase in tone of the musculature of both the small and the large intestine, following the administration of the opium alkaloids, will cause more even distribution of the content and lessen the tendency to distension, thus removing one factor in the production of pain. (*Journal of the A. M. A.*, April 13, 1929, p. 1269.)

HYPERVITAMINOSIS.—From data relating to the therapeutic potency of irradiated ergosterol in protecting experimental animals against rickets on an otherwise rachitic diet, it has been estimated that one part in many millions of food suffices to secure the prophylactic purpose. In human infants a daily dosage of considerably less than 4 mg. (6/100 grain) has already been demonstrated to be curative in cases of unmistakable rickets; and there is little doubt that this quantity may be considerably larger than the minimal protective dose. It should not be surprising if larger quantities of such potent substances would exert a pronounced effect on the organism, in directions that may not always be merely beneficial. There have been reports of experiments indicating the possibility of inducing hypercalcemia through use of large doses of irradiated ergosterol. There is no longer any doubt that harm may result from

extremely excessive doses of irradiated ergosterol in rachitic animals. The hypervitaminosis to which reference has been made in experiments has involved the use of truly enormous doses. There are no evidences of harm, but many indications of striking benefit, from the customary intake of fat soluble or other vitamins. Toxic effects at such enormous dosages should not in any way discourage the rational use of the properly standardized materials. For the benefit of those who wish to be on their guard for evidences of effects beyond the desired benefit, it may be stated that hypercalcification (eburnation), abnormally high blood pressure and hypercalcemia need to be borne in mind. (*Journal of the A. M. A.* April 13, 1929, p. 1270.)

PHENOBARBITAL.—Phenobarbital is the name given by the Revision Committee of the U. S. Pharmacopeia for the product introduced as luminal. Jobbers supply luminal on orders for phenobarbital U. S. P. In the past, this has been the only thing which they could do, as the Winthrop Chemical Co., Inc., proprietors of luminal, own the patent for this substance. The patent expires, however, May 7, 1929, and several manufacturers are already preparing to put nonproprietary brands of phenobarbital-U. S. P. on the market after that date—which, of course, will be sold under the official name. (*Journal of the A. M. A.*, April 13, 1929, p. 1295.)

COLLOIDAL MERCURY SULPHIDE-HILLE.—The Council on Pharmacy and Chemistry reports that the Hille Laboratories, Inc., Chicago, requested recognition of Colloidal Mercury Sulphide-Hille as a colloid prepared by the "condensation method", the stabilizing medium being a hydrolyzed protein "free from the properties responsible for the production of anaphylaxis in rabbits". As evidence for the value of the product the firm submitted the manuscript of a paper by G. E. Wakerlin and C. Eiseman which has been published, the manuscript of an unpublished paper by Wakerlin; and clinical data by R. H. Paterson. The unpublished paper by Wakerlin gives the results of preliminary animal experimentation which do not permit definite conclusions. The clinical trials of Paterson should be given little weight and cannot be taken to exclude risks from intravenous injection. The unpublished paper by Wakerlin (which is to be published in the Archives of Dermatology and Syphilology and was considered by the council at the request of its editor) is thus far the chief available evidence in favor of Colloidal Mercury Sulphide-Hille and it seems to show that the product is now ready for clinical trial. The council postponed consideration of the acceptance of the product to await the results of clinical trials. (*Journal of the A. M. A.*, April 20, 1929, p. 1349.)

TRYPARSAMIDE IN NEUROSYPHILIS.—Tryparsamide is indicated in certain types of neurosyphilis and has been used in systemic syphilis by some; but its efficacy there is probably much less than that of the arsphenamines. Tryparsamide has a toxic effect on the optic nerve and therefore should not be used in cases in which primary optic atrophy or neuroretinitis is recognized, either on ophthalmoscopic examination or suggested by the complaint of diminution of vision. During the course of treatment in an individual who has no pathologic changes in the optic disks, a careful ophthalmoscopic examination should be done before each injection in order to find the earliest possible neuritic damage. There are a variety of methods of treatment applicable to both systemic syphilis and neurosyphilis far superior to tryparsamide for the ordinary case and much less dangerous. (*Journal of the A. M. A.*, April 20, 1929, p. 1373.)

THE INJECTION TREATMENT OF HEMORRHOIDS.—The injection treatment of hemorrhoids was so viciously exploited by quacks that it was frowned on by most physicians. At present the method is used frequently by reputable proctologists. The English school has prac-

ticed the injection treatment with a 20 percent solution of phenol in glycerine. J. Boas in Germany has reported 200 cases in which injections with alcohol were made. A solution of quinine hydrochloride and ethylurethane has its ardent advocates. The use of a dextrose solution, injection after a preliminary intradermal procaine hydrochloride injection, is the most painless and probably the safest procedure. In certain cases the injection treatment is inapplicable. (*Journal of the A. M. A.*, April 20, 1929, p. 1373.)

PROPHYLAXIS AND TREATMENT OF PERTUSSIS.—The use of convalescent serum in the prophylaxis and treatment of whooping cough has been disappointing. Vaccine therapy has been extensively employed. The opinions regarding the effectiveness of the vaccines are greatly at variance. The Council on Pharmacy and Chemistry has not admitted any "mixed" whooping cough vaccine in New and Nonofficial Remedies. In regard to simple pertussis bacillus vaccine it states that the evidence for its value either for prevention or for treatment is questionable. Drug therapy has fallen into discredit in the treatment of whooping cough. The use of x-rays, ultraviolet rays and other light treatment has been tried without convincing results. When the weather permits, the best results are obtained by fresh air treatment. (*Journal of the A. M. A.*, April 20, 1929, p. 1374.)

ANNUAL MEETING OF THE COUNCIL ON PHARMACY AND CHEMISTRY.—Among the subjects of special interest to the medical profession which were considered at the annual meeting of the Council on Pharmacy and Chemistry held April 5 and 6 were: The board of trustees having requested that a special committee of the council be appointed to pass on food products offered for advertising in the publications of the association, the council considered plans and methods of procedure for the work of such a committee. The council discussed the rationality of a preparation combining type I and type II pneumococci in a serum for treatment of pneumonia and decided to publish a report on the present status of the serum treatment of pneumonia. The council considered certain allegations that inferior and unfit ergot is being imported and used for the preparation of the pharmacopeial fluidextract and decided that, in consideration of the lack of evidence for this assertion and the assurances of the government that no inferior ergot had been imported since September 1, 1927, no report was required at this time. The council asked its referee for scarlet fever immunization products to investigate the present status of such preparations accepted for New and Nonofficial Remedies and to report on the desirability of retaining or rejecting them. The council discussed the status of streptococcus preparations for the treatment of rheumatic fever made in accordance with the method of Dr. J. C. Small previously found unacceptable for New and Nonofficial Remedies, and concluded that, while the products are suitable for controlled investigation, propaganda which invites their use in general is not justified at this time. The council decided on the publication of a report on the dangers of serum therapy, particularly of protein sensitization. The council discussed the wisdom of permitting under certain restrictions the advertising to the laity of preparations of liquid petrolatum, of agar products and of similar preparations which act because of their bulk but postponed action on this question. The council decided to appoint a committee to report on the desirability and feasibility of the council's undertaking the work of passing on natural mineral waters. (*Journal of the A. M. A.*, April 27, 1929, p. 1430.)

IODOHELD AND OTHER REMEDIES OF WILLIAM HELD.—William Held, M.D., of Chicago, has received newspaper publicity in connection with various nostrums. His latest panacea is "Iodoheld". From Dr. Held's advertising, it appears that Iodoheld is an "Iodized, Aqueous Rare Earth Metal Solution." The "rare earth" in this

connection, seems to be cerium. According to Held, "Todoheld": "... has demonstrated its efficiency to successfully annihilate disease-producing micro-organism in the body, eliminate their products, heal inflammation, detoxinate and antisepticize tissues and body fluids, stimulate healthy granulation of pathologically changed organs, reduce fever by combating its cause and destroy tumors." It appears that Dr. Held also sells certain "gland products"; "Hormogene", which is "administered in the male for gonadal deficiency" and to "the female after surgical exposure of the arteries supplying the organs to be treated"; and "Calcrefer", which is said to be a "Calcium creosote iron compound for intravenous administration." (*Journal of the A. M. A.*, April 27, 1929, p. 1469.)

RELIEF OF EARACHE BY PHENOL-GLYCERIN MIXTURE.—Drops for earache that immediately and continuously give relief are not available, nor are they desirable, as they would mask the symptoms and permit middle ear suppuration to go on to mastoiditis with all its dangers and sequelae. Instillation, as hot as can be borne, of glycerin with 5 percent of phenol is usually adequate to relieve pain of acute nonsuppurative middle ear inflammation. If this does not suffice, prolonged irrigation of the ear canal with water as hot as can be borne, usually gives a great deal of relief. (*Journal of the A. M. A.*, April 27, 1929, p. 1471.)

ABSTRACTS

POTASSIUM PERMANGANATE IN THE TREATMENT OF PNEUMONIA*

JOHN L. CHESTER, M.D.
DETROIT, MICH.

Early in 1928 Doctor Chester treated an advanced and seemingly hopeless case of flu-pneumonia with a standard solution of potassium permanganate, giving the patient four ounces every three hours, with the intention of the fluid being retained rectally. This case had failed to respond to other methods of treatment, the patient being then in a moribund condition. Remarkable results were forthcoming in twenty-four hours, and still better in forty-eight hours. Pulse rate, temperature, respiration, became normal in four days, the patient recovered and convalescence was effected with more celerity and less fatiguing effort than is customary in such circumstances. Later, a series of twenty-three cases of lobar and broncho pneumonia were similarly treated, with equally satisfactory results, and but two deaths. The cases were all treated at Providence Hospital, Detroit, Mich.

At Eloise Hospital, Mich., which is maintained by the local Poor Commission, twenty cases of pneumonia were selected at random, ten of which were treated by the potassium permanganate method, with the result that there were 50 percent recoveries. The other ten were handled by other methods and all died. In order to understand the significance of this series of cases, it is pointed out that the patients were probably the worst kind of material for obtaining good results. All had been reduced to a low state of vitality by excesses, heart complications, and exposure. Most of them admitted chronic alcoholism.

Doctor Chester's paper includes concise case histories and detailed progress notes. It explains the method of preparation and administration of the drug, reviews the chemical action, and intimates its possibilities in other diseases. A short review of the origin of the treatment is given,—it was first experimented with in England,

reports to this effect contained in the *British Medical Journal* of March 7th, 1925, and March 12th, 1927, respectively, under the supervision of Dr. Herbert W. Nott, of Birkenhead, and Dr. Nelson J. Roche, of Southsea.

Although no claim is made that the drug is a specific in pneumonic conditions, Doctor Chester presents his observations and findings in the hope that further efforts will be made to discover whether or not a directed verdict can be obtained.

THE TREATMENT OF BURNS WITH NORMAL HORSE SERUM

Since 1920, STEPHEN R. MONTEITH, Nyack, N. Y., and RALPH O. CLOCK, Pearl River, N. Y. (*Journal of the A. M. A.*, April 6, 1929), have used normal horse serum in the treatment of burns. They use a sterile serum containing 0.35 percent cresol as a preservative. The bottle containing 100 cc. offers a convenient means of transferring the serum to an atomizer. It is said that normal horse serum increases the coagulability of the blood and, when applied locally, exercises a hemostatic action in controlling hemorrhage. It is the hemostatic action of the serum when applied to the oozing surface of the wound that accounts for its beneficial action in the treatment of burns. A bath of warm physiologic solution of sodium chloride precedes the use of the serum. It not only facilitates removal of the devitalized tissue but also prevents absorption of the toxins generated in the burned area. Normal horse serum containing cresol, when sprayed on the burned area, coagulates the exuding tissue plasma and thus provides the healthy cells with physiologic food, so that the cells can proliferate and form new, healthy epidermal tissue, and inhibits bacterial growth. The serum should be applied at least twice daily to prevent drying of the tissues in the burned area, which would cause death of the cells. After the normal horse serum has been applied, the wounded surface is protected with rubber tissue, which prevents evaporation and thus insures prolonged action of the serum.

ACTION OF MERCUROCHROME AND TINCTURE OF IODINE IN SKIN DISINFECTION

Methods of testing skin disinfection have been studied, with emphasis on the necessity of distinguishing between bactericidal and bacteriostatic action. It has been shown that there are extreme experimental conditions under which neither the 7 percent tincture of iodine nor the alcohol-acetone-aqueous 2 percent solution of mercurochrome will sterilize. The aqueous 2 percent solution of mercurochrome is not efficient as a disinfectant for the unbroken skin, but comparisons can be made fairly between it and preparations containing fat solvents. It has been shown that the 7 percent tincture of iodine and the alcohol-acetone-aqueous 2 percent solution of mercurochrome are equally effective in the sterilization of uncleaned human skin, a comparative study of the actions of these drugs giving results which differ only within the limits of experimental variation. W. W. SCOTT, J. H. HILL and M. G. ELLIS, Baltimore (*Journal of the A. M. A.*, January 12, 1929), believe that the aqueous alcohol-acetone 2 percent solution of mercurochrome more fully meets these criteria than the 3.5 or 7 percent tincture of iodine. The mercurochrome solution, in fact, seems to meet all these requirements. The iodine solutions, on the other hand, especially the 7 percent tincture, although sufficiently bactericidal, leave, when removed by alcohol, a poorly defined operative field. They frequently irritate the skin, and in cases of iodine idiosyncrasy may even prepare the field for secondary infection. The use of 7 percent tincture of iodine on the delicate epidermal covering of the external genitalia cannot be considered. The precipitation occurring when these iodine tinctures are mixed with blood not only makes their use in wounds of doubt-

*Abstract of original article appearing in the *Annals of Internal Medicine*, published by the American College of Physicians. Vol. 2, No. 11. May, 1929.

ful germicidal value but renders their use unsuitable in wounds in which the mercurochrome preparation may be used with impunity, as is done in this clinic as a final procedure before closure.

CAN INTRACRANIAL BIRTH INJURIES BE PREVENTED?

Unlike the firm skull bones of the normal full term child, those of the premature infant offer but little protection. In the premature infant both the dura and the vessel walls are of notorious fragility. It is well known that they often are severely lacerated merely by a forced or quick passage of the soft head through a not fully dilated cervix. Engorged veins or sinuses naturally will be ruptured more easily than empty ones. HUGO EHRENFEST, St. Louis (*Journal of the A. M. A.*, January 12, 1929), points out that nothing should be done to hasten or shorten a labor which seemingly is progressing normally, and particularly not in a premature labor. The obstacle offered by a rigid perineum can be overcome by an episiotomy. If, in the course of a normal labor, intervention either by medacoin or by instrumentation seems desirable in the interest of the child, the probability of increased risk to the child through such intervention should be properly weighed. The most common justification for extraction with forceps is the assumption or diagnosis of beginning intra-uterine asphyxiation. However, this diagnosis can hardly ever be made with any certainty. Serious dural injuries might be looked for if an extraction is done at a time when the position of the head precludes entirely appropriate application of the forceps. Irregularity and disquieting retardation of the fetal heart sounds often yield promptly to the administration of chloroform or ether in small amounts, just sufficient to stop, temporarily, the uterine activity and thus to relieve the excessive compression of the head. Undue haste in the extraction of the head, and especially of the aftercoming head in a breech labor, undoubtedly implies a risk to the fetus which in general is greater than the risk that hasty intervention intends to overcome. In many instances severe harm results from improper management of the infant who is only physiologically or slightly traumatized. It has been shown that one of every hundred new-born infants who are born dead or who die soon after birth, seemingly as the result of asphyxiation, between seventy and eighty actually succumb to intracranial lesions. Only one logical conclusion can be drawn from this fact: in the best interest of the seemingly asphyxiated baby, i. e., one who does not breathe properly, one should always consider it as probably having been intracranially traumatized. Therefore, only the very gentlest maneuvers must be employed in the resuscitation. The common practice of suspending the presumably asphyxiated baby by its legs is reprehensible because this inverted position necessarily favors further escape of blood from rupture and usually engorged vessels. If anomalies of presentation or of labor require instrumental intervention or certain clinical symptoms make it particularly likely that the evident impairment of respiratory function has been caused by an intracranial hemorrhage, the immediate subcutaneous administration of about 20 cc. of the father's or mother's blood will prove a valuable prophylactic measure against undue prolongation of a slight hemorrhage from a small vessel in the presence of reduced coagulability of the fetal blood.

MECHANISM OF LABOR FROM THE NEUROLOGIC POINT OF VIEW

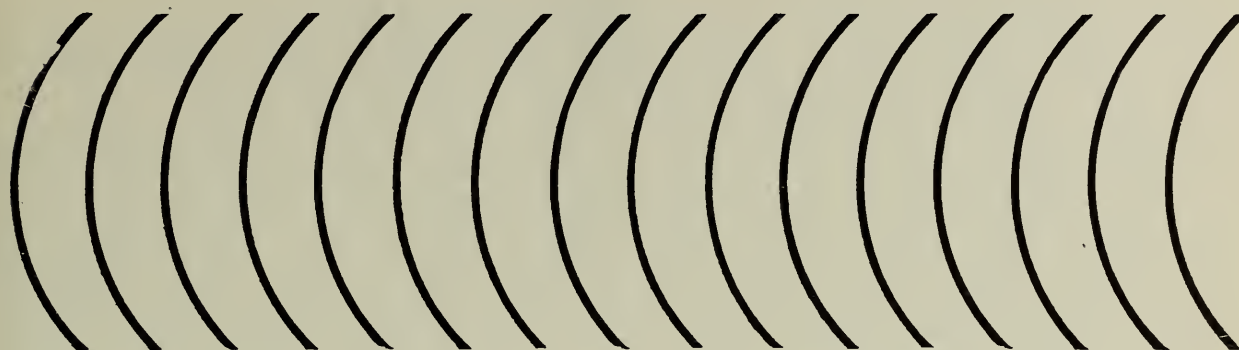
A difference in point of view between obstetrician and pediatrician is perhaps inevitable. As a pediatrician, BRONSON CROTHERS, Boston (*Journal of the A. M. A.*, January 12, 1929), believes that it is the duty of the obstetrician to consider whether it is not worth while to add to the ordinary conception of the mechanism of

labor a description of the effect of the imposed forces on the central nervous system of the fetus and the membranes surrounding it. He believes that it is quite feasible to formulate a description of the effects of force on the central nervous system. First, it is quite clear and easily demonstrable that the various parts of the central nervous system are very different in character, in function and in development at the end of pregnancy. It is equally clear that the cavity in which the brain and cord lie is subdivided so that excessive pressure, hemorrhage, and similar factors may injure one or more or all portions of the enclosed nervous system. Crothers believes that as long as the tentorium and falx are intact the medulla is unlikely to be exposed to injury. It is now generally recognized that abrupt or very severe pressure is likely to rupture this essential barrier to immediate and complete propagation of pressure. If rupture occurs, a sudden release of force drives the medulla into the foramen magna. Impaction may kill the fetus at once or render it unable to initiate respiration. In addition, of course, vascular injury is likely. Since most of the venous channels are surrounded by the folds that form the dural septums, profuse hemorrhage may occur. The vein of Galen is peculiarly exposed to danger. The clinical effect of interruption of the circulation from the interior of the cerebral hemispheres may well be impairment of the function of the basal ganglions. Typical brachial palsies occur in large numbers. Sixty new cases a year turn up with amazing regularity in one clinic at the Children's Hospital. No one has successfully denied that these cases represent the breakdown of tissue before traction. To the theorist it seems unlikely that all of them are necessary, since they usually occur after the head is delivered. The cord itself can be injured by evulsion of the plexus, by divulsion in the relatively unsupported thoracic region, or by stretching. The death rate in such injuries must be tremendous; yet enough survive to supply five or six new cases a year in this clinic. The clinical cases of presumed birth injury which can be shown form a large group. Crothers sees more children of this sort than of any other group with organic neurologic conditions, except infantile paralysis in epidemic years. The author believes one essential need is an active and sustained interest on the part of obstetricians in the mechanical factors of delivery, and a clear understanding of the predictable stress on the nervous system.

ACUTE OSTEOMYELITIS

This report made by Dean Lewis, Baltimore (*Journal A. M. A.*, March 9, 1929), is based on a study of 229 cases of osteomyelitis. A differentiation is not made between acute and chronic cases. In one of the cases cited, operation was performed within eleven hours after the onset. The patients were, however, rarely admitted to the hospital until from four to seven days after the beginning of the attack. There are included in this study eighty-eight cases of osteomyelitis of the femur. Nine of these patients died. Three deaths followed attempts at removal of large, almost total, sequestrums. This experience indicates that too radical a procedure should not be attempted in patients whose resistance has been lowered by long illness. The remaining six deaths were due to general pyogenic infections with metastases. Three of the patients with osteomyelitis of the femur were unimproved; fifty-nine, or 67 percent, were discharged as improved, while seventeen, or 19.3 percent, were discharged as cured. The percentage of improvement is high, but improvement usually means a discharging sinus or unhealed wound and indicates that surgery has not attained its aim—a healed wound. Some effusion or other evidence of joint involvement was noted in a relatively large proportion of cases. The knee was involved in forty-four of the eighty-eight cases, the hip in twenty-five and the hip and knee in seven. There were

(Continued on Adv. p. xx.)



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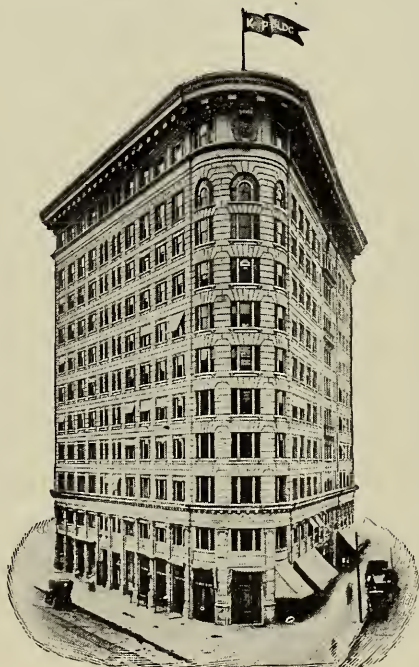
(Continued from page 268)

sixty-one cases of osteomyelitis of the tibia; two deaths occurred in this group. The two deaths were due to general infections. There were sixty-three cases of osteomyelitis of the humerus. One death occurred in this group; forty-nine patients were discharged as improved, one as unimproved and twelve as well. The elbow was involved in twenty-one and the shoulder in nineteen of these cases; both the shoulder and the elbow were involved in five, and in 64.5 percent one or both joints were involved. One cannot but be struck by the number of patients, about 50 percent who were discharged as improved. Multiple operations were required for recurring attacks and abscesses. Because such recurrences are so common, some surgeons believe that osteomyelitis is never cured. The author believes that some of the operations which have been suggested for osteomyelitis are harmful. Any operative procedure employed in the treatment of acute osteomyelitis should have as its objectives the prevention of general infections, the limitation of sequestration or reduction in the size of the sequestrums, and the prevention of deformities. As is indicated by the figures cited in the 229 cases discussed in this series, acute pyogenic osteomyelitis still remains a surgical problem. The importance of an early diagnosis is emphasized. The diagnosis must be based on pain, which is the constant, predominant and earliest symptom of acute osteomyelitis, and a definite localized point of tenderness limited in area and not found over the surrounding bone. During the first twenty-four to thirty-six hours, pain, localized tenderness and fever

may be the only symptoms of the disease, as the inflammatory process is confined to the interior of the bone and has not yet reached the periosteum, when redness, edema and induration of the skin are noted. If the sequelae of acute osteomyelitis—discharging sinuses or reformation of sequestrums—are to be avoided, the diagnosis must be made early and an early operation performed. When the diagnosis is made the supporting focus should be drained by a trephine opening or a burr, and the tension immediately relieved. If a subperiosteal abscess has formed, this should be drained and further stripping of the periosteum or injury of the bone carefully avoided. Removal of the sequestrum should be delayed until it is fully separated, for it is impossible to determine what bone is viable before separation has occurred, and the injury of surrounding viable bone may be followed by sequestrum formation later. The radical operation does not lessen the incidence of general infection. Radical removal of an infected marrow with a curet may favor the development of general infections and destroy bone. The development of deformities should be prevented. The surgeon can prevent these. The possibility of a dorsal dislocation of the hip should always be kept in mind in inflammatory processes about the hip, especially in osteomyelitis of the upper and posterior part of the rim of the acetabulum, which is supplied by an artery that may be closed by an infected embolus. Improvement in the retreatment of acute osteomyelitis depend on early diagnosis and the resort to drainage of the inflammatory focus in the bone. Periosteal stripping should be prevented. If a subperiosteal abscess has formed, this should be incised. Removal of the sequestrum should be postponed until it has completely separated, so that in removal healthy surrounding bone will not be injured by operative procedures. Trauma to surrounding bone may lay the foundation for the formation of a new sequestrum.

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ORIGINAL ARTICLES

DEVELOPMENTAL ASPECT OF CHRONIC DISEASES

BEAUMONT S. CORNELL, M.D.
FORT WAYNE

In the earlier period, growth, and in the later period, degeneration, make organic life always a phenomenon of changing states. It is true in health, but more striking in disease. To conceive of chronic disease as a series of progressive bodily changes, exhibiting different physiological states in the phases of its development, and to study actual cases from this viewpoint lends greater interest than to conceive of disease as one final, definite condition and to study cases as static exhibits of signs and symptoms.

The question, "What causes an individual to acquire chronic nephritis?" is no more challenging than the question, "What eventually happens to persons with major hysteria?" A complete answer to both would presuppose more thinking backward and more observing forward than most physicians can lay claim to.

Any chronic disease definite enough to be labeled with one of our trite diagnostic labels has had a very interesting past, during which it was too indefinite to be labeled at all.

Every honest physician, no matter how astute, will find a surprisingly large proportion of his case records without a diagnosis attached. It was not because of stupidity or inexperience, but rather because the physician had been trained to seek the *one-word diagnosis*. These puzzling cases were not text-book diseases but rather abnormal physiological states. These individuals were neither sick nor well. They were on the borderline between health and disease. They may now have recovered towards health, or they may now be progressing toward disease. They awakened but meagre interest because they were only phantom ships on an uncharted ocean, not familiar vessels moored to the docks.

A man in health carries within him the seeds of disease. There is a red light on every man's track, close, or in the distance. Danger may arise from his inheritance, his contacts, occupation, diet or habits of thought. Health is so delicate a counterpoise between order and chaos that even

a span of seventy years is impressive. Fortunately this balance is stable enough to withstand various and many insults, but certain combinations of insult are insupportable and lead to disease.

No chronic disease has only one cause. In bacterial diseases the micro-organism unites with that complex factor termed *susceptibility of the host*. If diabetes mellitus be regarded as failure of the insulin function of the body, then we may proceed to inquire what caused this failure—heredity, infection, functional strain? Rheumatic fever is being viewed as a constitutional type of allergic phenomenon instigated by a suitable infection. Pernicious anemia begins to look like a deficiency disease, not so much a deficiency in diet, as in the manner of the individual's handling the diet after it is eaten.

Etiology, quite obviously, is so invariably complicated that a philosophical generalization is justified—an individual becomes ill for no one reason but because of several known or unknown circumstances working together in destructive harmony. This viewpoint enlarges the scope of our study to include every recognizable factor bearing upon that ultimate debacle which we term disease.

The more information gained from the sciences, the more complex becomes etiology. Bacteriology and biological chemistry are uniting now with anthropology and constitutionology to render disease a truly fascinating phenomenon. The influence of infection, especially focal infection, combined with the influence of faulty diet and functional overstrain, can explain, by their many possible combinations and permutations, many abnormal physiological states which, lacking the aspects of text-book diseases, are at present frequently given but little attention.

A *disease* is merely a well-recognized type of abnormality, conforming so closely to other observed instances as to permit its inclusion under a generic title or sub-title. In the future we shall have recognized a host of less advanced conditions and have given them names. In the future, these changing physiological states which form the earlier pictures of the scenario will all be defined and labeled. It will be found that an individual progresses from health to disease through a series

of minor but contributing phases. The ground work of a disease may be a chronic infection, a persistent physiological alteration, a continued functional strain, an habitual error in diet or any combination of these or of other factors.

To know a disease one must trace backward, step by step, to the time when the individual was well; one must be certain of what the individual now presents; and, finally, one must follow into the future with untiring effort, to observe those further changes which bring improvement or deterioration.

In any abnormal state, regardless of how vague the condition may appear, the patient presents the results of definite causes. To search these out, identify and evaluate them, is one of the urgent duties of modern medicine.

Already we identify certain abnormal physiological states by diagnostic terms—hyper- and hypo-thyroidism, hyper- and hypo-tension, adiposity, achlorhydria, hypogonadism, hypoadrenalism, hypopituitarism, and many others.

Many an unnamed and vague condition is but the reaction of the body as a whole to a focal infection, and disappears after removal of the focus. Others are the result of a long-continued faulty diet because they disappear when a "normal" diet is prescribed. Others are due to strain on various systems, *e. g.*, overwork, either mental or physical, and they disappear through the use of rest.

Every physician has legitimate and urgent need of investigating the patient's psychology and social relationships. By such inquiry the early roots of essential hypertension, maladjustment states, and advanced functional nervous disease may frequently be uncovered and corrected by suitable, timely advice.

In the past our training has made us keen diagnosticians of the condition discovered on examination. Our ability is judged by our power to classify this cross-section of a disease. In the future our training will encourage us to recognize earlier cross-sections, and classify them. Our ability will then be judged by our prognostic acumen.

In other words, it is advisable to think of a chronic disease as a prolonged physiological change, composed of several intermediate pictures, of which the text-book type is but the latest to appear.

For this reason, the modern tendency in diagnostic nomenclature is toward the use of several words, rather than one word to designate the condition found. Some of these terms may be names of organic lesions, others may be phrases referring to functional disturbances, while still others are added to describe the mental state of the patient.

A modern clinical diagnosis is not one word but a brief collection of words and phrases culled to give a more complete picture of the

individual. It resembles a pathological diagnosis, and constitutes an inventory rather than a generic title.

The motive behind the adoption of this form of diagnostic language is a rebellion against the older, more static conception of disease. Its advantage lies in its greater descriptive power, its recognition of related phenomena, its preference for thorough tabulation over trite finality. It is to be welcomed inasmuch as it lends the importance of a name to states which cannot be called diseases.

Modern medicine is alive, as never before, with investigative energy and independence of thought. Today is an age of rebellion against standardization not only in medicine but in industry, art, religion, and in fact, every phase of civilization. Tradition is being sometimes too lightly cast aside. But it is certain that this virus of unrest has infected medical minds to a degree, and these modern minds are studying disease from constantly new angles. The *developmental aspect* of disease is one of the most refreshing attitudes and one worthy of adoption by every clinician.

Modern interest lies less in the generic classification of diseases than in the intensive analysis of the condition found on examination. The inventory type of diagnosis indicates a new ambition to push out beyond the conventional boundaries. The one-word diagnosis contained the seeds of an undesirable finality. Disease is not a static object. It is but the latest manifestation of a prolonged series of bodily changes, involving laws of bacteriology, chemistry, anthropology, sociology, and psychology.

Exactly where, how and why any chronic disease begins is a problem for the future. Our attention at present may most profitably be directed to analyzing every patient's condition with relentless energy and fearlessly tabulating our seasoned impressions as records, regardless of how vague, or formless, the patient's state may seem to be. This, combined with painstaking re-examination and future study of the patient, constitutes a golden opportunity which only the clinician can claim.

It may safely be assumed, however, that three of the most important factors which cause well persons to become ill, and which therefore conspire in the causation of chronic diseases, are focal infections, dietary errors, and physiological overstrain.

FURUNCULOSIS OF THE EXTERNAL AUDITORY MEATUS*

BYRON N. LINGEMAN, M.D.

CRAWFORDSVILLE

It is impossible for me to write a paper on furunculosis of the external auditory meatus with-

*Presented before the Indiana Academy of Ophthalmology and Otolaryngology at Indianapolis, December, 1928.

out including a great deal that you already know about this very common disease. You are all no doubt aware that this is one of the most painful diseases of the ear as well as one of the most difficult to treat. I have always had a feeling of helplessness when one of these patients came into my office, because I have never found any line of treatment that would give them any relief and prevent recurrences. It was in the hope that I might find a better method of treatment that I consented to write this paper.

In the study of any disease the first and most important thing is to look into the etiology. When the cause is recognized, then the mystery of the disease vanishes. I spent a good deal of time in trying to find out why it is that some people have boils in their ears every time they go swimming and other people do not. Or why it is that some people can scratch their ears with impunity and other people get a painful boil as a result. It is claimed by recent investigators that the resistance of the individual plays the most important part in the origin of these infections, and that this resistance is both general and local. We have the staphylococci with us always, but the resistance varies.

That this resistance is general is in accord with the well known observation that these skin lesions occur frequently, for example, in diabetes where the resistance of the entire body is subnormal.

That the epithelial cells of the skin have powers of resistance has been shown by some French and German investigators. Besredka was able to produce immunity in the skin of animals by simply rubbing into the shaved skin the filtrate from an old broth culture of the germs which he wished to produce immunity. He was able to make one side of an animal immune to staphylococci while the opposite side was highly susceptible.

Dr. Thurman B. Rice, of Indiana University Medical Schools, in conjunction with laboratory workers of Swan-Myers & Company, has been doing some very good work along this line. They have produced a preparation called "bacteriophage" which is simply a broth culture of the causative organism, filtered through a Seitz filter. This preparation has been found to cause lysis of living cultures of the same organism. In a report printed in *THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION*, Dr. Rice reports some very good results in the use of bacteriophage in the treatment of boils, acne, cystitis and infected bed sores.

The local skin resistance seems to be lowered by such conditions as chronic eczema of the canal and in dry ears associated frequently in deafness and probably due to a trophic disturbance of the ceruminous glands. Maceration of the skin for example by soap and water seems to lower the resistance. It is probable that in some people the shape of the canal is such that the water gets in

easier and when they are not carefully dried maceration results. In some of these conditions there is an intolerable itching of the canal and the entrance of the infection is made easy by the patient using his finger nail, hair pin or a toothpick in scratching his ears. In cases of deafness the itching seems confined very largely to the ear drum. Furunculosis is essentially an infection of a hair follicle or sebaceous or ceruminous gland by staphylococcus auris or albus, therefore it is disease found only in the cartilaginous portion of the canal.

The general resistance is lowered by fatigue, constipation, too much carbohydrate in the diet, diabetes, anemia, focal infections, etc.

The symptoms of the disease are given very well in Kerrisons, "Diseases of the Ear" and I would like to quote from him.

"The patient may first be conscious of a sense of occlusion or 'stiffness' in the affected ear and with this he may notice that very slight manipulation, e. g., as in drying the ear after the morning bath—gives rise to a sense of soreness or even sharp pain the ear. Later this discomfort or pain may be induced by extensive movements of the jaw, as in yawning. The next symptom is usually that of constant pain in the ear, at first of moderate grade, but gradually increasing and finally becoming unbearably severe. The pain caused by the furuncle of the meatus is in many cases quite as severe as that accompanying acute otitis media, and is augmented by the intolerable sense of soreness usually present. A characteristic feature of the pain is found in the fact that it is usually made worse by movements of the jaw—e. g., chewing, yawning, etc. This is, of course, explained by the close anatomical relation of the cartilage of the temporomaxillary joint and the cartilaginous framework of the meatus. Tinnitus aurium is a symptom the prominence of which varies in different cases from slight head noises, that are overlooked in the severity of other symptoms, to loud ringing noises which add much to the patient's discomfort. In some degree it is nearly always present. Impairment of hearing is not usually present at the onset, but becomes progressively more noticeable as the caliber of the canal is reduced, and may be very marked if the occlusion of the canal is complete."

Pressure on the tragus or pulling or moving of the cartilaginous meatus usually causes pain, which is a very important symptom in differential diagnosis.

In the incipient stage inspection of the meatus with reflected light shows but little change. Later on, however, there is marked localized swelling of the cartilaginous meatus which sometimes almost completely obstructs the meatus. A good view of the ear drum is often quite impossible during this stage.

Kerrison divides the disease into four stages as follows:

"1. Initial stage, in which the patient experiences a constant sense of discomfort, but pain only on manipulation of the cartilaginous meatus. Inspection may reveal no noticeable change in the contour or color of the canal, but palpation with a cotton wound applicator discloses a point of maximum tenderness, representing the focus of infection.

"2. Stage of inflammatory infiltration in which inspection reveals circumscribed redness and swelling of one or more walls of the meatus. Palpation shows the tumefaction to be hard, tense, nonfluctuating, and exquisitely sensitive to pressure. This is the most painful stage of the disease. To my mind this is so painful because the cartilage is inflamed and there is no room for expansion.

"3. Abscess stage. The involved area representing circumscribed and encapsulated collection of pus, bulges into the canal is found by palpation to be distinctly fluctuating and may point and rupture spontaneously into the canal.

"4. Stage of surrounding cellulitis. Certain cases fail to develop an encapsulated abscess, and extend by invasion of surrounding structures, giving rise to oedema or cellulitis in front or behind the ear, with consequent displacement of the auricle."

Furunculosis of the external auditory canal must be differentiated from the following conditions: Acute eczema, diffuse external otitis, acute infections of the parotid gland, acute otitis media, acute mastoiditis, especially subperiosteal abscess.

The differential diagnosis is not usually difficult if a little care is given to the examination. We must remember that all inflamed conditions of the ear canal are not caused by furunculosis.

The difficulty arises when we get two or more of these conditions simultaneously. For example an acute otitis media followed closely by furunculosis in which we get an increase in pain, and fever and we are not sure which disease is playing the major role. It is also very difficult at times to distinguish between a subperiosteal abscess due to mastoid infection and one due to a furuncle. Some of these difficulties will be illustrated by an actual case which I wish to report later in this paper. The essential thing in furunculosis is the localized inflammation of the skin and cartilage which accounts for the extreme pain upon manipulation of the cartilage and points of localized tenderness and swelling which are usually found.

The treatment depends upon whether we accept the local immunization theory or not. If we do, then the only procedure of value is to increase the immunity of the skin in the meatus. This can only be done, according to the advocates of the theory, by the "stimulation of the host by the germ or its metabolic products." They claim to do

this by such preparations as bacteriophage. I have tried bacteriophage (Swan-Myers & Company) on twelve cases, and my results were encouraging, although I did not get the immediate relief of pain that some of its advocates claim. It did seem to hasten the ripening process, shorten the duration of the disease and prevent recurrences. We cannot be sure of these things, however, because they might have occurred anyhow. We need further careful clinical trial of this preparation, using it alone in a large number of cases before we can be sure of its efficiency.

Other methods of treatment which have given fairly good results are as follows:

During the initial stage, Kerrison advises cleansing the canal with ninety-five percent alcohol followed by a pledget of cotton saturated in 1 to 100 carbolic acid which is allowed to remain for a minute, then he packs the canal rather firmly with gauze saturated with 10 percent ichthyol solution. Ballinger advises the use of twelve percent phenol in glycerine, but this causes maceration of the skin in my experience and would seem to be conducive to recurrences. Irrigations with hot aqueous solutions have also the same objection unless the canal is carefully dried following their use. Alcoholic solutions are very good because they tend to shrink the tissues, act as a germicide and do not macerate the skin.

The question as to when to open these furuncles is a debated one. Some advise opening them early, that is during the second stage, while others advise waiting until the abscess stage. My experience has been that I do not get very much relief in early incision. A good many cases get well without any incision at all. Incision is very painful unless the boil has ripened, and requires a general anaesthetic, gas preferred, which is not always available, I prefer to wait until they ripen.

While the furuncle is ripening, the use of dry heat together with large doses of aspirin and phenacetin help to make the patient more comfortable. In severe cases codeine or morphine should be given if necessary for sleep. A solution of aluminum and lead acetate ten percent, or Burrows solutions applied hot is used in the Vienna Clinic. Many other treatments have been advocated, such as diathermy, ultra-violet rays, infra-red light, ionization of tin in the meatus, etc.

After the boil has opened the canal should be kept clean with dry cotton on an applicator and alcohol drops instilled two or three times a day. As in any disease the most valuable treatment is the preventive kind. I believe this disease could be prevented in a large number of cases with a little care.

We should do something for those people who have that intolerable itching of their ears. For the dry ears, liquid albolene, white precipitate ointment, boric acid ointment, olive oil or yellow oxide

of mercury ointment, one percent applied are good. It is usually impossible to stimulate the ceruminous glands after they have once ceased to function, but the ear can be kept lubricated with any of the above mentioned substances over a long period of time and trouble prevented. In the chronic eczematous cases, salicylic acid two to four percent in alcohol applied once a day is very good for the itching. Also silver nitrate solutions from ten to twenty percent applied occasionally are good.

In the chronic cases the general health of the individual should be investigated, his urine and blood examined for sugar, his diet and bowels regulated. Vaccines help in some cases but the trouble is most people think that every boil will be the last one and do not like the idea of vaccines. The patients should be advised against using soap and water in their ears, and absolutely against picking their ears. All foci of infection should be removed and the patient put in the best physical condition possible.

The case which I wish to report is of a young girl whom I saw soon after I was asked to write this paper. I saw her in my office on Sunday and I asked my brother who was visiting me at that time, Dr. E. L. Lingeman, to see her with me. We were both a little perplexed as to the diagnosis. She said she had been suffering about three weeks with pain in her ear. She had gone first to a general practitioner who thought she had an acute otitis media and incised her ear drum. He told me that he got a small amount of bloody serum. Her ear did not improve, so she went to another physician at Darlington who advised irrigations with hot water. This did not relieve her pain and she lost a great deal of sleep. When my brother and I saw her there was quite a fluctuating swelling just above and a little posterior to her auricle. Her auditory meatus was swollen and tender and there was a good deal of debris so that a good view of the drum was impossible. There was some oedema over the mastoid and slight tenderness, but not as much as when the cartilage was moved. The x-ray report came back that there was cloudiness over the mastoid and probably pus in the cells. I sent her to the hospital and had her prepared for a mastoid operation. I made a curved incision through the skin one inch higher than the usual mastoid incision, went in by blunt dissection and found a large accumulation of pus beneath the periosteum in the temporal region which was evacuated. The mastoid bone was inspected and found healthy. A cigarette drain was introduced, and the wound drained posterior as much as possible. The patient left the hospital on the second day feeling fine.

In conclusion I would like to summarize briefly:

(1) Furunculosis of the external auditory meatus is one of the most common and most painful diseases of the ear that we have to treat.

(2) Treatment of this disease so far has been unsatisfactory.

(3) A new preparation called bacteriophage together with a new idea of the causation and treatment of disease have been brought forward and should be given a fair trial.

(4) Preventive treatment is very important.

(5) The x-ray is of little help in differential diagnosis.

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DISCUSSION

A. D. EREHART, M.D., (Anderson): This paper leaves little for discussion, because as a rule we are able to recognize these conditions readily. It is only the treatment that gives us any trouble, and I think the real reason of that is that we have not gone into the constitutional condition behind the furunculosis. We have been inclined to treat it more as a localized affair, whereas either a sty or furunculosis of the ear is more constitutional than local.

The local treatment I think can be summarized more or less as keeping the ear clean, relieving the patient of as much pain as possible. Other forms of local treatment have been more or less disappointing. Cooperation of the patient means a great deal in these cases, and unless you have that you will have trouble.

I might cite a case I had a year ago, a man who developed furunculosis of the ear and came to me. He was taken care of, but came back with another one, and after having taken care of four or five, I tried to get him to cooperate with me and told him that unless he did I did not know how long they would run. He refused to take a vaccine or to use any medicine in his ears, he refused to have any systemic examination, and consequently over a period of about three months I opened (or they opened themselves) fifty-seven boils in his ear. So unless the patient will cooperate with you and let you make the proper examinations, you will not get far. I think these recurring furunculoses in a great many cases should be turned over to an internist for physical examination, and the otologist should limit himself more or less to the local condition.

J. H. FRENCH, M.D. (Hartford City): Furunculosis of the external ear canal is one of the most common conditions the aurist meets, and is perhaps most lightly considered, yet this apparently simple condition often leads to the most

distressing and serious consequences, requiring the skill and best judgment of the trained aurist. Referring to the literature and text-books on this subject, I was surprised to find little reference to the serious aspect these cases often assume.

Since giving this subject some thought I recall my experience with one of these cases: A woman, fifty years of age, came to me saying she had been treated by a local physician for a discharging left ear for three weeks, with no improvement. Examination of the left ear showed the whole auricle oedematous, the swelling extending over the mastoid region and down the left side of the neck. The skin had a bluish-red color and the swelling was of a board-like nature. It was impossible to see into the ear canal, but at the opening a tough greenish pus exuded. This patient was put in the hospital and an attempted ether anaesthetic given which almost ended disastrously. When ether was started the patient became very cyanotic, respiration and heart almost failed, an accident which I find is not uncommon when giving an anaesthetic in the face of a cervical cellulitis. When the patient's condition became better I made multiple incisions down the ear canal back of the auricle, and down the side of the neck. Each incision showed a dense cellulitis, the cellular tissues filled with this same thick, greenish, tough pus, resembling the contents of a large carbuncle. The incisions were kept open by packing and depleting solutions used. In about two weeks this sloughing mass cleared up and showed a large gaping, granulating wound which extended from the posterior surface of the mastoid region down to the clavicle. A most interesting demonstration of the facial nerve after leaving the tip of the mastoid, and the carotid artery could be demonstrated for several weeks. The whole surface of the external auditory canal sloughed away down to the bony wall. This wound closed in about three months, leaving an atresia of the external auditory canal.

From the serious aspect these cases frequently take the question arises as to the attitude which ear men should take and what is the best method of handling these potentially serious cases. It is my belief that we should consider every case of furunculosis of the ear canal serious until otherwise proven.

One thing I insist on is not too much and too early manipulation and incision before localization has taken place. Also, keep the skin of the ear canal wall from touching the skin of the opposite side. This can be done by packing lightly with a dry or moist medicated gauze. Another important point is to give ventilation to the ear canal, exposing it to light, either sunlight or artificial, at definite intervals while treatment is being carried out.

As to the use and merits of bacteriophage, I have had little or no experience, but I am afraid

it is another product which, like ephedrine and the vaccines, has been put into the hands of high-powered salesmen, hoping the profession will grab at the proverbial last straw. All these preparations may have some merit, but I believe we can still rely on well tried surgical and medical principles in the treatment of these cases.

A. E. BULSON, M.D. (Fort Wayne): One thing has not been mentioned. Many of you may have heard a paper presented before the American Medical Association by Dr. F. Parke Lewis of Buffalo, in which he gave his experience with the infra-red ray, saying that he could not practice medicine without it. I have been rather inclined to discourage some of the things that have been offered under such extravagant claims, but I do want to say that I have been impressed with the soothing effect of the infra-red ray on painful affections about the eye and ear, and especially furunculosis of the external auditory canal. It does not supplant other measures, for I strongly believe that there is a constitutional element back of these troubles, a good deal like the sty, and that you have to regulate the diet and give patients plenty of fresh air if you want to get results.

In addition to keeping the ear dry and packing lightly with ichthyol, I make it a custom to have the patients use the infra-red ray a half hour each day. A patient who is really suffering when I begin the ray will say, "Doctor, the pain is all gone." I have had the same experience with patients who were suffering extremely from iritis. Do not get the idea that I am going crazy over the infra-red ray, for I am not; but as an adjunct it will give these patients more comfort than almost anything else. I do not like dry heat because to do any good you have to use it almost hot enough to blister, and we all know that moist applications have a tendency to macerate the ear. However, I have no hesitation in having moist compresses about the ear provided it is packed with ichthyol.

W. W. HOLMES, M.D. (Logansport): I want to report a case, a railroad conductor, forty-three years of age, who came in suffering great pain in the ear, and on visual examination one would say it was furunculosis. There was a pointing abscess evidently ready to open. I opened it, but when I got in I found it was a dermoid cyst opening through the anterior quadrant of the external canal.

EDGAR C. DAVIS, M.D. (Muncie): In the discussion last year it was mentioned that aluminum subacetate was used considerably. I wonder if any of the men are using it now, and what are their results.

C. A. ROBISON, M.D. (Frankfort): In regard to the infra-red ray, about three weeks ago I had a carbuncle on the back of my neck. I had not been using the infra-red ray, but I tried it in my own case and in a few minutes I was relieved. Since then I have been using it in furunculosis of the ear and find it gives great relief.

A. D. EREHART, M.D. (Anderson): I have been using aluminum subacetate and have gotten better results than with anything else. That is, after cleansing the ear thoroughly with alcohol and drying it, I put in a small wick saturated with a saturate solution of aluminum subacetate, and give the patient a small bottle to take home and keep the wick saturated, and then come in in a day or two to have the wick changed. To me it has given the best satisfaction of any treatment I have used for this condition.

C. H. McCASKEY, M.D. (Indianapolis): I would like to ask whether the result you get is a lessening of the time of the furunculosis as to the so-called crop course spoken of. Do you have recurrences after the first one?

DR. EREHART: I have not had very many crops of furunculosis since I have been using aluminum subacetate, but whether that is the cause or whether the patients have been able to throw off the condition, I do not know.

C. J. ADAMS (Kokomo): I recall a case I had a number of years ago. I had just started in ear work and this patient was a friend of mine, so I worked very hard but was not getting anywhere, and finally I sent him to Dr. Masters, father of our secretary. He examined the man thoroughly and treated him and sent him back to me, and in his letter he said, "If you will use silver nitrate in the canal you will have better success with these cases." I followed his advice. Dr. Masters used forty percent silver nitrate, and since that I have never failed with any of these cases, and it seems to me it shortens the course of the condition. I cannot recall having a persistent case of boils in the ear when I used that treatment.

H. W. EBY, M.D. (Goshen): I have had my share of boils to treat. I have nothing original to add, but since I have been using alcohol in the ear I have prevented the recurrence of boils oftener than formerly. I do not think it does much good to the boil already formed, but I instruct them to put alcohol in frequently—every four or five hours, and of course in the presence of alcohol there is no multiplying of germs. I have had very few crops of boils since I have been using alcohol.

BYRON D. LINGEMAN (closing): I appreciate this discussion, especially the interesting reports of cases.

I have had no experience in the use of aluminum subacetate. I would like to try it some time and see how it works. Those who use it early seem to get good results.

UNDULANT FEVER*

J. B. BERTELING, M.D.
SOUTH BEND

Three or four decades ago a regiment of English soldiers stationed at Gibraltar contracted

a disease which was traced to the drinking of milk from goats imported from the island of Malta. The reason these soldiers drank goats' milk was because cows need pasture or else imported grains and hay, neither of which was available or practicable, whereas goats can live on scant herbage among rocks and cliffs. Goats' milk, let us say in passing, is, for economical reasons, quite common in certain parts of the world, and as for food value it is equally as efficient as cows' milk. As goats are not supposed to become infected with tuberculosis their milk is advocated for tuberculous patients as being possessed of antituberculous properties. In limited quantities, goats' milk is served to certain institutions and hospitals for children, and costs from 50c to 75c a quart.

The disease which the soldiers contracted from the milk of goats was accurately described by the regimental surgeon and the description remains a classic to this day. Because the goats were imported from the island of Malta it was called Malta fever. Malta fever is then an affection caused by drinking goats' milk, not cows' milk.

In the last five years and more, especially in the last twelve months, attention has been called to a disease contracted by drinking cows' milk. The symptoms of this disease are very similar to those of Malta fever, namely and chiefly in well defined and especially acute cases, as a continued fever lasting from several weeks to many months and the after effects and relapses in some cases for years. The name undulant fever has been applied to this disease when cows' milk was the causative medium because of the wavy character of the symptoms—up today, down tomorrow—then up again and down again. Frequently, in fact, before the physicians became acquainted with it, it was mistaken for either tuberculosis or malaria, but chiefly for typhoid fever. To differentiate between undulant fever and typhoid fever required an expert bacteriologist in an up-to-date laboratory. While we may assume that there are many good laboratories in the state of Indiana, only four have been recognized as fulfilling certain requirements: of these one is in the capital city, Indianapolis, the other three respectively are in Lafayette (Purdue University), Fort Wayne and South Bend.

Whenever a given ailment of which continued fever with all the attendant symptoms is the outstanding picture and yet does not conform to the well-established features of tuberculosis, malaria or typhoid fever, the suspicion should suggest itself that it might be undulant fever. A specimen of blood should be secured and sent to some recognized medical laboratory for a differential diagnosis. At this point it is timely to state that only raw milk is the carrier of the specific germs of undulant fever. By raw milk is meant a milk which goes directly from the dairy farm to the consumer without any intervening treatment or process such as pasteurization. If in a

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given case raw milk has not been consumed for any length of time or not at all, the disease may still be undulant fever because the first recognized and established cases were found amongst technicians and bacteriologists in laboratories where raw milk and milk products such as cream, butter and cheese coming from raw milk were examined.

It might be interesting here to note that Dr. Edward Francis of the National Health Service in Washington, D. C., and celebrated for the discovery of tularemia, commonly called rabbit fever, was in the Naval Hospital for several months stricken with undulant fever (so-called Malta fever), in the investigation of which he is an authority and during the studies of which he became infected from the examination of raw milk.

The question naturally presents itself: Is this undulant fever a new disease, else why have we not heard of it before? Let us go back in history a moment, also let us consider the dear old homely cow and find out what is wrong with her and how long she has been wrong, and are all cows wrong, and if she is sick must we stop drinking her milk?

We also naturally ask the question, why is it that the human family has been drinking milk for ages and apparently were none the worse for it—now why this sudden uproar about Malta fever and undulant fever and finally, do scientists and experimenters know what they are talking about? What is the remedy, if any?

We will explain—

About the year of 1908 Bang, a veterinarian in Denmark, discovered the cause of abortion in cows and established the fact that this phenomenon has its seat in the lining membrane of the cow's womb and that the exciting factor was a germ or bacillus to which was given the name *bacillus abortus* or the *bacillus of Bang*. This investigation also established the fact that it was a communicable disease among cattle, but by separation (quarantine) of the aborting animals infection of the whole herd could be prevented.

So many diseases of animals and plants have come to us from European sources that in all probability this disease among cattle was also imported. Veterinarians and cattle breeders have known of this infection for years, but until lately were loath to admit that it could be communicated to humans. Today it is admitted, if reluctantly, that as high as 50 percent of all milk producing cattle are infected with this disease which naturally means a great economical loss to the farmer. It is the greatest menace to the cattle industry today, but, since recognized, ways and means will be found to eliminate it.

All known cases of true Malta fever have been traced to the milk of infected goats. All cases of undulant fever have been traced to the consumption of raw milk from cows infected with contagious abortion, or to contact cases from infected cows, directly or through milk. This statement

is absolute and permits of no controversy, and is accepted by all recognized authorities.

It is now accepted that bovine (cow) tuberculosis may be communicated to man and as a result in many states all tuberculous cattle are ordered slaughtered under federal inspection and the owner compensated at the market price. In this way many counties in the state after inspection and testing show only one-half of one percent of tuberculous cattle. All well conceived milk ordinances insist on yearly testing for tuberculous cattle. Under this system tuberculosis among cattle is reduced to a minimum and rarely does one hear of bovine tuberculosis communicated to man.

Let us turn now to contagious abortion, the direct cause of undulant fever.

In a certain city of the state several cases of pronounced undulant fever were diagnosed and the diagnosis established beyond question. In this city (South Bend) an ordinance provided for raw and pasteurized milk, both under stringent regulations. When the undulant fever cases were discovered conjointly by an internist and bacteriologist under state supervision and testing for contagious abortion, twenty-one cases out of the eighty-seven of the herds of raw milk producers were proven reactors—some active, others dormant. All the undulant fever patients were raw milk consumers from the herds infected—in fact the disease was traced from the patient to the raw milk producer, to his herd, aye, to the infected cows. Whereas only 150 out of the 16,480 cattle were found infected with tuberculosis, of this same number more than 3900 cattle were calculated to be infected with contagious abortion, or about twenty-five percent. As mentioned before, the state veterinarian admits fifty percent. The one hundred and fifty tuberculosis reactors were destroyed according to law, but it was impracticable to destroy the thirty-five hundred contagious abortion infected cattle and maintain an adequate milk supply; furthermore it was needless, as will be shown further along.

Pasteur, the French savant and father of bacteriology, in the middle of the last century demonstrated that all pathogenic (disease producing) germs were destroyed by raising the temperature of fluid media to the boiling point. It was then further demonstrated that, in the case of milk, if suspected milk was raised to the temperature of between 142 degrees and 145 degrees Fahrenheit and held there for thirty minutes all pathogenic organisms were absolutely destroyed. This process is called "Pasteurization."

The reasons why people for ages past have consumed milk without apparent bad effects are manifold. The first was the almost universal practice of boiling milk, not with any purpose of destroying germs but because boiled milk kept from souring longer than raw milk unless it was kept cold either by ice or extremely cold water. Ice is one

of the modern luxuries in common use only three or four decades and was not available in the past. In all the hot countries where ice is not procurable boiling still is the preventive from rapid souring, because it inhibits the development of lactic acid germs.

In the second place, more cattle are infected today than centuries ago.

In the third place, bacteriology, as a practical science is only a half century old, consequently, we are unable to say how many diseases were contracted by drinking raw milk. It is an established fact, however, that the worst epidemics of typhoid fever resulted from typhoid infected milk produced on farms where typhoid fever prevailed. In the city of Montreal two years ago the worst epidemic of typhoid in the history of the western continent was traced to the consumption of raw milk infected with typhoid fever germs. Citizens of Montreal during the same period who consumed only pasteurized milk escaped the disease.

Against the use of pasteurized milk it is contended that pasteurization destroys certain properties of the milk, the absence of which is detrimental to the health of people, especially children, whose diet even beyond the nursing age consists for several years of milk. The harm done to milk by pasteurization is so slight and the destroyed properties so easily replaced by the daily ingestion of half a teaspoonful or less of tomato or orange juice that this objection has no basis in fact.

Some people emphatically declare that raw milk has a more acceptable taste than pasteurized milk. Let it be said equally emphatically that whoever finds raw milk to taste different from pasteurized milk is drinking milk which has in it the filth of the cow and barn.

The basic principle of pasteurization then is the destruction of disease causing (pathogenic) germs such as tuberculosis, typhoid fever, undulant fever, different varieties of pus germs causing intestinal disturbances, septic sore throat and most of the acute eruptive diseases such as smallpox, scarlet fever, measles, and chickenpox. It will be noted here that malarial fever is not mentioned because true malaria is not contracted through the respiratory or intestinal tracts but by direct inoculation through the bite of a certain mosquito harboring the germs of that disease.

After pasteurization milk will still contain a certain number of bacteria, but these are benign or harmless—some milk ordinances require that pasteurized milk shall not contain more than 50,000 bacteria per cubic centimeter (a cubic centimeter is the equivalent of a cubic five-eighths inch square). This of course means millions upon millions of germs in a pint or quart of milk, but they are harmless insofar that they cause no disease. To go further along these lines would land us into the established germ theory of disease, a discussion of which in its ramifications is foreign to these articles, **certified milk**.

It would not be amiss at this point to say something about certified milk. Certified milk is milk produced subject to certain rules and regulations established by the American Association of Medical Commissioners. These rules are very comprehensive, including within their scope the design and construction of dairy barns, their manner of ventilation, material of floors, drainage, etc., as well as the cleaning of cows, sterilization of milking machines and other utensils, sterilization of automatic filling and capping machines, bottles and cans, weekly physical examination of all employees and farm hands, and the insistence of a bacterial count per cubic centimeter not to exceed 10,000. All cows must be inspected at stated intervals and must be tested and found free of tuberculosis. Incidentally, it may be mentioned here that there is only one certified dairy in the state of Indiana, located at Hobart, Indiana, and all its product goes to Chicago. This dairy also has a herd of goats. Certified milk commands a higher price than pasteurized milk—anywhere from 20c to 25c a quart, as against 12c for pasteurized milk.

Certified milk is raw milk, remember, *raw* milk. To make it reasonably safe for continuous use the cattle on such a dairy farm should be tested not only for tuberculosis but likewise for the bacillus abortus. At present there is no law compelling any certified milk dairy to test cattle for contagious abortion. Many certified dairies now voluntarily test for contagious abortion, which is a commendable practice, and they dispose of all reactors as soon as detected. When all has been said and done, certified milk is still raw milk.

While it is the writer's conviction that the best milk is certified milk pasteurized, he realizes that others may differ and that many counties and cities and states have different laws and the people different opinions, professional or otherwise. Still, he cannot let the opportunity go by without urging that if raw milk is the only milk procurable, it be boiled before consumption, and he would further urge that information be elicited from the county veterinarian as to whether the cattle from which milk is offered for sale are tested and found free from tuberculosis and contagious abortion, and that in all other respects the dairy farms are in a healthful condition.

It should not for a moment be concluded that the writer proposes to load the dairy farmers with additional burdens, for he realizes full well that he has not and is not receiving a fair price for his product. The writer is a health officer in one of the second class cities of the state of Indiana, and believes he knows what he is talking about.

It is his experience that, with the exercise of a little care by ordinary dairy farmers, grade A raw milk can be produced by them which, in purity and healthfulness, will compare favorably with the milk produced on some certified dairies, and which will have a bacterial count approaching,

and oftentimes below, the standard required for certified milk. All that is necessary to achieve this result is inspection and education by competent milk inspectors who are human and not swivel chair autocrats; and, on the part of the producers, understanding and willingness to conform to reasonable and fair milk ordinances. Cleanliness is the basis of pure wholesome milk. It is almost as easy to be clean as to be dirty; true, it may require a little extra soap and some extra towels, but the satisfaction of feeling that such a product as milk, on the purity of which may depend a customer's health, of the best that can be produced, repays for the effort made, to say nothing of the additional profit which such a product can command.

It is the writer's opinion that all dairy cattle should be tested for tuberculosis and contagious abortion, at least once a year by competent veterinarians at the expense of the county, and examined at the same time for any other animal defects detrimental to the wholesomeness of the milk obtained and offered for sale.

No matter how milk was produced centuries ago, since the advent of bacteriology so many sources of infection, so many communicable diseases have been traced to the impure milk that it has become incumbent on the government, whether federal, state or city, to safeguard this universal food, from the moment it leaves the cow until it reaches the consumer. Healthy cows, healthy attendants, clean barns, pure cold water for cooling, clean utensils and cans, rapid transportation from farm to distributor and effective pasteurization by efficient, healthy employees, with healthy surroundings, in buildings and with equipment approved by competent health officials, finally refrigeration and delivery within thirty-six hours. These are the factors which make for pure milk.

The consuming public has a duty to perform. Milk should not be left on front porches for hours in the hot sun; it should be kept as cool as possible, with ice if available. Bottles should not be returned to the distributor unwashed. Bottles are the property of the dairyman and should not be used for other purposes than that for which they are intended—containers of milk and cream.

Pasteurization plants should be inspected frequently, and no such plant should be tolerated when the owner or manager is not conversant with the fundamental principles of pasteurization.

At the present time only one second class city in Indiana has an absolute pasteurization ordinance, (and two lesser cities in its neighborhood.) In another city of the second class a pasteurization ordinance was vetoed by the mayor. Very likely the Hon. Mayor did not understand what it was all about. Perhaps he does not drink raw milk, or any kind of milk. But if any of his friends or members of his official family contracted undulant fever in as violent a form as the

writer has witnessed he would not hesitate another minute to recall his veto and hasten to sign that ordinance.

In a certain city and its immediate neighboring counties, with the exclusive pasteurization ordinance, by reason of a high class laboratory, superintended by a highly educated physician, bacteriologist and pathologist, thirty cases have been identified within twelve months as undulant fever, some severe, other less so, but none as yet entirely recovered. A year ago a paper on the subject of undulant fever received scant attention but this year in October the American Health Association presented a symposium of six papers on the subject, making it practically the order of the day. The medical departments of state and city and its veterinary departments all over the country are alert to the importance of meeting this menace both to the cattle industry and to the health of the public.

At a low estimate, there are not less than a thousand unrecognized cases in the state of Indiana. In a certain college town fifteen students were stricken suddenly with this disease contracted from milk produced by the college herd of registered cattle, all duly tested for tuberculosis but not for contagious abortion.

In conclusion, a word to the public:

Your legislatures stand ready at any moment to appropriate vast sums for the cattle industry, but will hesitatingly and if at all, reluctantly, appropriate infinitesimal sums for public health.

If the information is correct, about \$15,000 is set aside annually for milk inspection in Indiana. At the present time there are nine milk inspectors for the entire state, paid by local communities, whose exclusive duty it is to inspect dairies (in one city alone, 1400), besides supervising thirty pasteurization plants. Such cities require at least three inspectors to properly serve the public with pure milk and the State Health Department should have \$60,000.00.

Boards of health are underpaid. For example, a certain town of 20,000 inhabitants is compelled by state law to limit the pay of the three members of its board of health to fifty dollars annually per member, while the secretary of the board, commonly called health officer, can receive only five hundred dollars. Under such a statute the services rendered will be worth exactly what is paid for them, and nothing more. Officials receiving such remuneration cannot and should not be held responsible for the health of the community beyond the extent of their salary. The fact is, no self-respecting physician should accept such a position unless for altruistic motives he is willing to give gratuitously an amount of his time which in dollars and cents would be worth four or five times what he is paid.

If you want undulant fever drink raw milk and more raw milk, but "the goblins 'll git you if you don't watch out—."

THE PHYSICIAN OF THE PAST, PRESENT AND FUTURE*

FRED H. BOWERS

Attorney-at-law

HUNTINGTON

The investigation and contemplation of the physician of yesterday, today, and tomorrow is a most alluring as well as a most profitable study. It brings us face to face with the progress man has made in the realization of the truth and importance of what a wise man said so many years ago, "The greatest study of mankind is man." The investigation becomes doubly fascinating and alluring when even a limited inquiry brings us so inescapably to the conclusion that every real advance or progress that medicine has made in its entire history has consisted in the discovery and recognition of some fundamental principle wrought or utilized by the Creator of the universe, and, in the art of the application of such principle, to the health, well-being and consequent happiness of mankind.

As we contemplate your profession in the upward struggle of the last three thousand years, we behold the gradual and sometimes tardy progress from the densest ignorance and yet blinder superstition. A progress from the baneful and fanatical beliefs in the nature, influence and operation of gods and demons, of witchery and fatalism; of superstition and fanaticism, to that rather modern appreciation that health or the lack of it is referable to the operation of fundamental laws, and that scientific reasons exist for both. Instead of disease, declining health, mental or physical, being a visitation of the wrath of the gods, or the mystical and pernicious decree of demons, prevalent everywhere, we, today, in part at least, recognize in them the evidences of the violation of the inexorable laws of the universe, scientifically known as the laws of nature.

When we behold the transition from the hoodoo, tom tom, or the exorcism of evil spirits, to the intelligent, confident, scientific performance of the modern physician; when we fly from the witch of Endor to the kindly and intelligent ministrations of that goddess of mercy, the modern nurse, we gratefully recognize that law, truth and reason reign today in masterly control, as they have ever reigned, though unrecognized, since the stars first sang together and long before the sons of men shouted for joy.

When we come to know that fixed basic law and not blind chance, not the mysterious vacillations of the fickle, sinister ravings of mad demons, nor even the uncertain favors of benign gods, ancient or modern, controls our physical and mental status; when we have come to believe that for our every ill there must be a panacea if we are but intelligent enough to search it out, we then are moved to solemn wonder and unbounded in-

terest and admiration in the past progress and the future possibilities of your great profession.

Your real achievements and fundamental advancements are rather modern. It was in the olden age of Greece, when painting, sculpture, oratory, literature, art, architecture and law making were and still are the wonder of the ancient as well as the modern world, that your venerated Hippocrates lived. He was approximately a contemporary of Socrates, Aristotle, Plato, Pindar, Homer, Aeschyles, Sophocles, Euripides, Herodotus, Xenophon, Pericles, Demosthenes and many other famous Aeolian, Dorian and Ionian bards, men who were the wonderful product of a wonderful people. Plato's remark illustrates the estimate of a great mind on the importance of this age when he said, "I thank God that I was born a Greek and not a barbarian, freeman and not a slave, man and not a woman, but above all, that I was born in the age of Socrates."

Notwithstanding the progress along these many other fields of achievement, when measured by the light of this day, we are somewhat amazed at how little Hippocrates knew that was true and how much he knew that was wrong. He believed and taught that the brain is a gland whose function is to condense into mucus the ascending vapors; that the kidneys were connected with the bladder by the veins; that the nerves were hollow and conveyed animal spirits; that the liver prepared blood and bile; that the blood was warm in the left heart and cold in the right. The physicians of that day, as of all times, did not escape the satire of the punster. One bitter rogue wrote:

"Diophantes, sleeping, saw
Hermas, the physician;
Diophantes never woke
From that fatal vision."

Six hundred years later came Galen, who was so well received and honored that it is said "his influence was felt for twelve hundred years." Even he, too, thought the blood was prepared in the liver.

The Chinese claim some considerable antiquity for their knowledge of medicine. They claimed to be able to produce anesthesia two thousand years ago by a preparation known as Mago. The Chinese believed, however, that the stomach was the resting place of the mind, the liver the granary of the soul, the spleen the seat of reason, and the heart the author of ideas.

It was not until 1667 that Harvey discovered the circulation of the blood. Jenner in 1796 discovered the means, method and benefits of vaccination for smallpox. How important was this latter discovery when we learn that in 1770, twenty-six years before Jenner's discovery, three millions of people were swept away by smallpox in India alone, and that the disease killed sixty millions of people in Europe in the seventeenth century.

*Presented before the Eleventh District Medical Society at Huntington, May 16, 1929.

The real progress of medicine has been made in the last fifty to seventy-five years. These years are lighted with the radiant glow of the achievements of the outstanding men of your profession. The benefits of their work to the human race never can be measured, recounted or adequately appreciated. Their heroism and sacrifice, and consequent blessings to mankind shall call forth gratitude, praise, and highest honor until all language is dead and until the lips of men are no longer able to express the gratitude and appreciation of the human heart.

The mere mention of the names of a few of the heroes of these recent years inspires every head to bow with the deepest gratitude, and every heart to voice pæans of everlasting praise.

In 1846 Dr. Morton, of Boston, discovered anesthesia. Along about that time Pasteur discovered the germ theory of disease and demonstrated that micro-organisms cause infections and putrefaction. This discovery was followed by that of Lister and Koch who discovered antiseptic surgery, or how to guard against infection in surgical operations. With these two great discoveries, anesthesia and later aseptic surgery, the way was opened up for modern surgery. Today there is hardly any part of the body, including the brain and the heart, that cannot be explored with almost absolute safety. There is, now, very little speculation as to the anatomy of the human body or the functions of its various organs.

The day of the oracle is past, or is rapidly passing, and the day of investigation, analysis and demonstration has arrived. The stethoscope, clinical thermometer, the x-ray, the microscope, the test tube and laboratory, added to modern clinical analysis and many other modern inventions, are now the equipment of every up-to-date modern medical practitioner. Ten millions of tubercle bacilli could not half fill a thimble, yet the keen eye of modern scientific medicine has sought them out, separated them and exposed them to view. The germs of many other diseases are equally well known. Today, we place an electric light into the remotest part of our inmost "innards" and light up the entire landscape. With almost uncanny skill and unerring accuracy and safety we probe and penetrate every part of the structure of the body. While there are still some things that have eluded the keen research of the modern investigator, guess work with the physician who is properly equipped and has kept up with the march of events in his profession, has been reduced to the minimum.

The men who have ceaselessly toiled in the research laboratories and clinics have achieved the most wonderful results, often with little or no public mention of the benefits conferred on the human race. One in every seven soldiers in the Spanish-American war had typhoid fever. In the late war less than one in every thousand soldiers had typhoid. We are not so proud when

we recall that Indiana still has the highest death rate from typhoid of any state north of the Mason and Dixon line, yet even the present rate in Indiana is only ten percent of what it was but thirty years ago. There are men before me, as I speak, who have stood by in helpless agony as they watched a little child, entirely conscious, looking into their faces with the mute and pathetic appeal for help which could not be given, while the child was slowly but inexorably choking to death with diphtheria. Today we are able to immunize children against this disease and thus prevent their acquiring it at all, and with the aid of antitoxin we can give almost immediate relief to those who get it. It is computed that the "Black Death" (Bubonic plague) has, in the past, swept away one-fourth of all the people of the entire world. Today it is rarely known in civilized countries. Yellow fever, smallpox, hookworm, malaria, pellagra, tularemia, tuberculosis, leprosy and other scourges of death that formerly swept the face of the earth like a hideous, consuming blast from Hades, unhindered, unstayed and uninvestigated, have now been met and stayed by the almost invincible phalanxes of modern physicians armed with the weapons of modern medical science. Instead of these deadly diseases being considered today as a visitation of the wrath of the Almighty, the scourge of God, thanks to Louis Pasteur we now know that microscopic bugs, infinitesimal micro-organisms, come in contact with our bodies, into our food, and into our lungs and blood, and the battle with death begins. We know today that the house fly, the mosquito, the cootie, cats and dogs, as well as humans, and the wings of the wind are carriers of these infinite demons of death. We believe today, more than ever before, not only "that cleanliness is next to godliness," but that cleanliness is life and consequent godliness. If it is true that the spirits of those who have lived in the past but are now departed have the power and privilege of occupying reserved seats somewhere in the twilight zone of the universe, and there have the power of beholding the efforts and achievements of those of us who are still doing battle in life's arena, surely the hearts of Hippocrates, Galen and many other heroes of the past must have rejoiced, and the very farthest spaces of the heavens must have resounded and echoed with their approval and applause, as they beheld the hidden mysteries of the past, one by one, coming to the light of the new day as the result of the patient study and investigation of these modern disciples of the older men of medicine.

The temptation of the hour, naturally, is almost irresistible to dwell at length and with unbounded fervor on the achievements of the past, and up to this good day. Our sincere gratitude almost overwhelmingly prompts the naming of the modern heroes of progress in your great profession, one by one. We think of men like Dr. John Goldberger,

who, as many of you will recall, died just a few weeks ago. A man whom the hundred percenters would banish from our land, for Dr. John Goldberger was a Jew. For fifteen years he battled with the dread disease of pellagra. This disease was annually bringing a miserable death to thousands of men, women and children in the southern part of our country. For fifteen years, unceasingly and untiringly, he studied, struggled, worked, sacrificed and experimented, and he fought a mighty fight. He won a glorious victory. Too much cannot be said for a man like Dr. Goldberger. He was one of the great heroes and benefactors of recent years. So intrepid and unquarable was his spirit that if he had been an eagle he would have fought the storm. Such men can never die. He has but passed through the door we call death, to clasp hands with others, heroes of yesterday, who, like himself, are "carrying on" in that life for us yet to be. However, time forbids the roll call of the many other heroes and, reluctantly, we pass from the contemplation of their achievements. We pause, however, to give mention, acclaim and highest honor, not simply to the achievement of these outstanding members of your profession, but a grateful people can never forget nor cease giving the highest praise to that great army of your comrades in every city, town, village and hamlet—from the humblest country doctor to the most learned and skilled specialist—to all the men who have kept step with progress, and with painstaking devotion to their ideals, and with intelligent, persevering service have ever, through the years, served nobly and faithfully, and do thereby merit the sincerest gratitude of their fellowmen.

So much for the yesterday. What of today and tomorrow? Have we now arrived and is there no clear right-of-way for progress ahead? Has the water which has passed over the dam dried up the bubbling fountain head at the source of the stream? Have we solved all the problems of the law giver of life? Have we climbed the slope and are we on the level plateau? Are there no peaks, no steep, menacing, heart-breaking barriers ahead? Do we know what o'clock it is in the world today and are we content that the tick of time, for us, may cease? Are we saying, "'Tis enough; come, let us rest upon the laurels of yesterday?" To all of these questions every live and worthy member of your profession eagerly answers, "No." We have not arrived. Our position is not static but most vitally dynamic. We still behold our enemies in possession of important citadels. Death stalks in the night; deadly assassins of men, women and little children are still at large. Armies of our fellow citizens, friends and loved ones are still falling daily before the onslaught of cancer, pneumonia, infantile paralysis, rheumatism, infections of the heart and many degenerative diseases. Of these, and others, we are still largely ignorant. But our confidence,

born of our past achievements in conquering other and more deadly enemies, prompts the eager bugle call to battle against our remaining foes. We rest in the sublime confidence that the great Chemist of the universe did not stop short in providing, alone, the means for combatting and counteracting the enemies that already have fallen before the advancing hosts of intelligence and enlightenment. We believe that somewhere and at some time in the future, near or remote, it will be ascertained by some patient, persevering searcher into the chemistry of earth, and air, and sea, that the means have been placed, somewhere within our reach, to batter down, one by one, these remaining pernicious and destructive foes of our physical well being. The solution of the yet unsolved mysteries must exist. The panacea you seek lies, as yet, just beyond your grasp, but some day, either in the humble office of some alert seeker in your ranks or in one of the now numerous and elaborate research laboratories, some specially trained, patient, keen, but persevering disciple of Aesculapius will be able to cry out "Eureka," and place within your hands the remaining effective weapon which you now so much desire.

And now, gentlemen, members of an honored profession, after thus attempting to bring before you the long distance you have traveled in the last three thousand years, and after attempting to place the highest and most well-deserved estimate upon your achievements, it is with no little hesitation, and with no merely assumed temerity, that we venture to suggest to you that while we confidently believe in an early surmounting of these purely scientific difficulties yet awaiting solution; that some of the greatest problems and consequently the greatest possible progress are yet confronting you and challenging the best that is within you. Utopia is yet a dream and a vision, far distant, and the way to this fair land of perfection, like the way from Jerusalem to Jericho, is a rocky road and beset with many seemingly, almost insuperable difficulties. Your present greatest problems and difficulties are not the conquering of cancer, pneumonia, rheumatism, infantile paralysis and high blood pressure, conceding that these are highly important and that their solution will be an almost invaluable boon to poor humanity. We shall have opportunity to suggest for your consideration but two of these mighty obstacles, interposing themselves between you and that perfect day. The first of these is within your own profession, and almost entirely within your own control. The second and greatest and most insuperable barrier to the attainment of your highest haven has to do with the rest of humanity.

In the presentation of the first of these most important situations it should be, of course, most positively and definitely considered and fully understood among us, that we are not applying these remarks to anyone in your profession in this

medical district; and that we are not suggesting by even the remotest inference, that the malady about to be suggested by us, as within your profession, has attached itself in the slightest degree to any one of the doctors in this district, let alone having reached anything like contagion. William James, one of the greatest if not the greatest of modern philosophers, thinkers and psychologists, and likewise a physician of note, said at one time that the average man becomes an old foggy at twenty-five. That he passes through his youthful period of development, his school days, his apprenticeship, and by the time he is about twenty-five he has arrived at such a measure of proficiency as to be able to make a living. He begins his chosen work and thereafter he goes along merely using the faculties which are his, mentally marking time, more or less automatically, with his capacities and stage of development practically at a standstill. Hence Professor James calls him an "Old Foggy." Some of you read an article written by Bruce Barton for the *American Magazine* a few weeks ago, entitled "When You're Through Changing You're Through." The suggestions of these two outstanding men are really most thought-provoking and startling. They naturally provoke introspection, and, if we are fair with ourselves, a merciless self-inventory, an introspection that should be entirely free from any taint of egotistical self-gratulation.

I already have referred to the wonderful advance in intelligence and the progress of the science in your profession. Dr. Rice, one of the brightest men of your profession in the State of Indiana, along certain lines, in referring to the constant and rapid advance of medical knowledge and methods of treatment, said, in substance, a few days ago, that the changes were so radical and so rapid that a doctor limiting his study and efforts to even a rather narrow field in some specialty was kept so busy in keeping himself informed and up to date with the rapid modern progress that in doing his very best he was barely able to hang onto the march of progress by his eye lashes. If you were to step into many physicians' offices tonight, over in the state of Ohio, in the state of Michigan, down in Kentucky, or in Illinois, you would find the same books and only the same books on their shelves which they placed there twenty-five or thirty years ago. You would find them covered with dust.

You would not find a single *modern* textbook or current scientific periodical of their profession anywhere. You would find, in some back room, shelves filled with a lot of old bottles whose labels had grown faded and illegible. You will find these bottles intermingled with many generations of dead flies, spiders, cobwebs and dust. The physician, you would find in most cases, a fine man to meet and quite generally respected in his community. He hasn't, however, had time to notice that while he has been so busy making a

living, the intellectual, scientific and professional world has kept right on moving for the thirty years since he received his license to practice his profession. He has been too busy to attend modern clinics or to listen to the voice of the modern leaders of his profession. If his attention were to be called to the matter he probably would say he didn't have any faith in these new fangled methods anyway.

Gentlemen, if it is true that the torch of progress and intelligence is being carried forward by the leaders of your profession so rapidly that the keenest can hardly keep stride; could it be possible that the highest efficiency could come from the man who tied himself to a stake thirty years or more ago? The saddest and most tragic thing about the situation is that generally he doesn't even know or have the slightest suspicion that he is tied to a stake. He would resent and does resent the suggestion that he is not fully abreast of progress. This, however, does not change the very obvious and sad truth, nor the fact of incompetent service, that very obviously must be the result of his inefficiency. I think I hear someone protest that the picture of the lack of progress and resulting inefficiency, as drawn, is overstated and that it does not properly picture any general situation. That the picture is overdrawn may be true. But if this malady as pictured is overdrawn it is not because the malady does not exist, though the symptoms may be somewhat exaggerated. "Well, Patrick," asked the doctor, "how do you feel today?" "Ach, dear doctor, I enjoy very poor health, entoirely. The rheumatics are very distressing, indade! indade! When I go to shlaape, shure, I lie awake all night. When I bend me arms, faith, they're stiff as me shelayly. Me toes is schwelled as big as a goose hen's egg! En whin I schtand up, be dad, dear doctor, I fall down immegit." We all will agree that Patrick was sick, but we don't know just how sick.

Falling into a rut is not limited to the members of any one profession. Progress—keeping step—requires constant mental massage. Thinking and real thinking is the hardest work in the world. That may be the reason why so many men are content to move along the lines of least resistance, just drifting with the tide. Mental inactivity is so soothing and comfortable to the man who mentally is saying to himself, "Just a little more sleep, a little more slumber, a little more folding of hands." It was Carlyle who said, "Thought is stronger than artillery sparks, and at last moulds the world like soft clay." When we are all somewhat inclined to move along lines of least resistance, and to linger on our laurels, it is difficult for us to remember that we are all in the kindergarten of God, and only death shall graduate us. We are all familiar with that old bit of wisdom that "Life is just one damn thing after another," and that being true, none of us may safely "dig in" at any particular place and just "stay

put" unless we want to cease to really live. The narrower the rut in which we manifest some slight symptoms of life, the more we are inclined to feel that it contains all the wisdom of the universe. It is those men who have delved deepest and who have climbed highest that are truly humble, as from the peaks to which they have toiled, above the clouds in the valley below, there they behold the immeasurable expanse beyond. Do we not appreciate, admire and envy the wise old philosopher who, after a long and busy life spent in searching out the knowledge of the universe and wisdom of the earth, as he stood on the seashore in the twilight, his sun about to set, and while in final contemplation of his life and of his attainments, said, "I seem to have been only like a boy playing on the seashore and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me." (Newton.)

Surely, friends, it is a wonderful thing to live, really to live. As with strenuous insistence we struggle on the stiff up grade, of course we have our hours of lassitude. We become so weary at times and long for the Elysian fields of dalliance, delight and indolent drifting. We have our moments when we would turn from the wearisome and dangerous struggle to an alluring and enchanting peace; from self-denial to self-gratification. Our philosopher friend, Rudyard Kipling, has expressed this mood for us when he said,

"Ship me somewhere east of Suez,
Where the best is like the worst,
Where there ain't no ten commandments
And a man can raise a thirst.
Oh! the temple bells are calling,
To a place I long to be,
By the old Maulmein Pagoda,
Looking lazy out to sea."

While we all have these moments of reaction when the seductive song of the siren of lethargy would lull us into a sluggard's inactivity, our saner reflection and the inexorable law of life teach us, in terms that cannot be mistaken, that inactivity, that cessation of change, usher in atrophy and approaching senility. And Bruce Barton is right when he says, "When a man's through changing, he's through." Oh! he may linger along a while in the wake and in the dust of the procession that has long since passed him, but so far as the real and vibrant life is concerned "he is through."

The second and greatest barrier to your realization of a perfect tomorrow is due to the ignorance, prejudice, superstition, egotism, static inertia, and criminal indifference, of a large part of humanity outside the ranks of your profession. In making this assertion we are not unmindful that we have frequently listened with no small

pride and satisfaction to the grandiloquent assertions that we are the greatest people in the world; that we are the most highly cultured and enlightened nation that has ever graced this old sphere. That there is with us a more universal diffusion of knowledge and the most superb and advanced civilization that man has ever known; that the Almighty reserved his last and best effort in creating and locating the wisest, most accomplished, progressive and highly favored people right here in this U. S. A. "We are the people." No one wishes to depreciate our progress, superiority or glory, but might we not humbly suggest that while it might not be pleasing to our pride, a casual contemplation and an unbiased look at ourselves, free from the waving of the flag, free from the befogging cloud of pompous egotism, might help us to answer the longing of the immortal Scotchman who sat behind a very complacent and self-satisfied lady in church one day, and saw a louse doing a shimmy up and down the lady's bonnet; and thereby he was moved to a little homely philosophy and to the exercise of his muse in the well-known words:

"Oh, wad some power, the gift to gie us
To see oursel's as ithers see us;
It would frae mony a blunder free us
And mony a foolish notion."

We rarely pause to contemplate that in this land of the wise and the brave and the free we have a very large class of people who often vie with Charlie Curtis's sister to sit down at or near the head of the table, and who often do sit there. A large and notable class, who will generally and quite freely admit the charge of being in class A, intellectually; really the elite, and supremely content in possession of the *ne plus ultra* of wisdom. A people, good people, respectable people, whose names are well up on the "400" list but who nevertheless, exhibit a superlative degree of complacency when some child of the family becomes ill, and becomes all filled up with typhoid fever germs, or when pneumonia bugs fill its little lungs with pus; or when diphtheritic micro-organisms fill its little throat and it approaches its last gasp for breath and reaches out its tiny hands to mother with an agony of pathetic, heart-breaking appeal for help in its fast-dimming eyes. Mother sits calmly by, reading from a book, a book written by a nice old lady from Boston Town. The book, and its teachings may be all right, nobody seems really to know, but the ears of the hellish death-dealing bugs haven't been cultivated sufficiently to appreciate its beauty or efficacy, if it has aught of either. And, amazingly as it must seem that though it is now nearly a hundred years since Louis Pasteur demonstrated to a certainty the positive existence and deadliness of these germs, and though thousands of scientists have verified Pasteur's conclusions, and though many of them may be seen through the micro-

scope and their absolute existence proven and their deadly effect demonstrated positively, and with as much certainty as anyone in the world knows that there is such a place as Boston Town, yet, this great class of so-called cultured and highly educated people do not know they exist and really deny their existence. And when that precious young life goes out and its prattle is hushed, and its loving, tender, angelic smile has gone forevermore, with piously clasped hands and saintly pose, with holy resignation, they solemnly and unctiously say, "The Lord hath given and the Lord hath taken away, blessed be the name of the Lord." Everyone here present knows that if the same mother were to place her hands about the throat of her child and choke the life out of it by shutting off the health and life-giving oxygen from its lungs, she would not only be a murderess under the laws of the land, but she would be condemned by everyone, in Boston or out of it, and forever execrated as a miserable wretch, unfit to live and to associate with decent people anywhere on earth. But when she sits idly by, withholding her hand and her voice, when a call over her telephone would bring, in a few minutes, a physician with a positively known antidote that would mean life instead of death, she not only is not condemned as a murderess but may, forsooth, confidently continue as the queen of what we call society, sought out, courted, fawned upon, honored as the salt of the earth. Doesn't it make you wonder how long we are going to continue to begin our silly obituaries as with unhallowed mockery we say, "Whereas it has pleased Almighty God to remove from our midst our beloved," etc., etc. Surely God must have all the forbearance, all the long-suffering patience, all the pity for our poor, dense ignorance, that the most sublime and faithful adorer has ever attributed to Him, when we observe from Him no visible evidence of any resentment of the charges laid to His responsibility. How long! Oh, how long!

Then, again, among these superior Americans of ours, that have so courted and absorbed the very quintessence of wisdom we find another very large class, distributed and located in every state, city, village and hamlet, not quite so elite or bon ton, or so exclusively par excellent, perhaps, as the other class just referred to, but including multitudes claiming no small measure of superior intelligence. This class, when afflicted with colic or cancer, dysentery or dislocation, measles or melancholia, gallstones or goitre, bunions or bubonic plague, typhus or tetanus, mental, moral or physical ills of whatever name or nature, will straightway hie themselves to someone, male or female, who by way of learning or preparation may never even have known the inside of the village high school but who may have spent a few weeks in making the astounding discovery

that a backbone is not always the ridge pole of a porker's corporeal structure that one may buy at the meat market. Thus equipped, the "treatment" begins. While the treator almost bursts a lung in his endeavors to control his laughter at the credulity of the treatee, the wise sachem, the learned medicine man, proceeds to do a tango on the posterior portion of the confiding victim's anatomy, after which the patient pays his money—yes, he pays his money—and then he gets well or he doesn't.

"Here lies my wife, Elizabeth Proctor,
She caught a cold and wouldn't doctor,
She could not stay, she had to go,
Praise God from whom all blessings flow."

Many of us believed that the story of the Salem witchcraft of two hundred years ago was a story of the long ago, a story of almost antediluvian ignorance; that most surely today we have a people of intelligence, the product of our public schools; that we no longer seek to merit heaven by making earth a hell. Just a few weeks ago, however, in the year of our Lord 1929, in the state of Pennsylvania, within an hour's journey from Pennsylvania University, or from our great Columbia University, twice persons were charged with murder committed in connection with the practice and belief in witchcraft. The revelation was made that large communities still sincerely believed that one or more in the community had the power of placing spells on others; that these witches could place a "hex" on another at will, or could relieve all manner of human ills by the conjuring magic of incantations and pow wows of the witch's mysterious and supernatural power.

We still ward off disease by wearing a bag of asafedita with a string about the neck.

We still measure the body of the babe with a string to cure it of short growth.

We still make tea of things not mentioned in polite society as a cure for our ills.

We still spit and cough and sneeze tubercle bacilli all over the landscape.

We still carefully close our windows at night for fear of the deadly effects of the night air.

We still have our Fosnaugh, the divine, and a thousand other ignorant mercenary charlatans and quacks preying on thousands of people too ignorant to appreciate that they are the mere dupes of the soothsayer, conjurer and crook.

We still have many people who refuse to believe in or accept the benefits of vaccination, prevention of diphtheria, typhoid and many other easily prevented ills.

We have been told frequently that Americans as a race are digging their graves with their teeth. The amazing thing is that society generally is conscious of this fact and beholds thousands of its fellows going to heaven annually by the beefsteak route, simply eating themselves to

death. Society generally, and our enlightened societies of uplifters and reformers never have even the remotest suspicion that any moral turpitude attaches to that manner of exit from this hectic life. A man may make a garbage garage of himself and thereby go galloping to his grave, but the preacher's funeral oration will give him a clean bill and land him safely in the celestial choir harp in hand. But if that same man were to be suspected of any pre-Volstead predilections, however moderate, instead of singing in the celestial choir, multitudes of his fellow citizens, headed by the sacerdotal Shumakers could and would gladly see him clearly in those reputed regions where there are no wintry blasts, and where his feet sizzle on the red hot pavement, and he shovels coal whether he needs the fire or not. In other words our highly civilized intelligence and fine moral discrimination is such that it makes a vast world of difference whether John Doe takes his poison in solid or liquid form; whether he operates a fork or a glass.

As heretofore suggested, we receive into the politest and most exclusive society the mother who reads a lot of drivel while her child is dying of diphtheria or typhoid, but with something akin to sanctimonious glee we send the mother of a large family of small children to prison for life because there was found within the precincts of her humble home a half pint of gin. You and I are well aware that in our high state of enlightenment it is exceedingly unpopular for anyone even to suggest the incongruous asininity of some of these prevailing modern mental operations and moral gymnastics, and I pause to give warning to you, ladies and gentlemen, that if any of you have any ambitions at any time to run for any public office, if you presume to think at all, it had better be thinking in humble and even servile conformity to this modern mass thinking and prepare to fit your neck into the yoke so gracefully worn by the Honorable Solomon Spiffledink. Otherwise the juggernaut of the professional uplifter and self-styled hundred percenter and moral pacemaker will be waiting for you just around the first corner.

But you are, no doubt, saying within yourselves, "What has all this to do with the physician of tomorrow?" Conceding that, as a profession, we may have discovered the scientific solution of the many ills of humanity; and conceding that ignorance and prejudice and indifference prompt thousands of people right here in America to refrain from accepting the benefits of our discoveries of truth and from cooperating with us and our ability and desire to help them; what can we do to change a situation which, while we recognize we most earnestly deplore? We stand ready to bring our best skill and patient service to the needs of humanity, rich or poor, or whatever may be the station in society. Though we are able, ready and willing to help them, we

cannot do so if they are not willing to be helped and will not cooperate with us. It seems apparent that there can be but one answer to the question, one solution of the problem. In the tomorrow there must be enlightenment in place of ignorance, sanity in place of imbecility, virility in place of degeneracy, and open-minded comprehension, elevation and acceptance of scientific truth in place of superstition, knavery and quackery.

In this connection is it not fair to say that one of the most pronounced reasons for the lingering of ignorance, prejudice and error along the lines referred to is that the men of your profession, as a class, have such a stubborn reluctance to affirmative efforts to place the needed light in the place of darkness. It must be conceded that there are noteworthy and outstanding exceptions among your numbers who have most successfully emerged from what seems to be either indifference or merely a hesitancy on the part of many of your profession to do battle against the forces of blind, dense ignorance; or against the forces of parasitic mercenaries who designedly encourage and foster ignorance, prejudice, superstition and shallow moral hypocrisy. Whatever the reason, it seems to be true that so many of your profession having received a large measure of the light yourselves are now more or less indifferent to or aloof from activities conducive to enlightened citizenship or to an ordinary measure of intelligence in others. Your profession is rightfully known as a learned profession. Has not man a right to look to you, not alone for the amelioration of his physical ills but also for intelligent leadership to direct faltering, stumbling, sometimes almost despairing, humanity forward, onward and upward on the long highway from darkness to light. The beneficent gleam of the light of your progress has been a guide in the past, but you have it much more within your power to be the creators of a more effulgent light and the heralds of a more glorious dawn. Your reluctance to enter this public service may be due, in part, to the fact that the curriculum of our medical colleges is limited almost wholly to technical or strictly scientific subjects. This may be the reason why physicians do not take a more prominent or general place in civic affairs. Your profession has within it a large class who are intelligent, active, conscientious, patriotic citizens as well as learned and skilled physicians. It is also beset, however, by its quacks, pretenders, shams and scavengers, who, by their guileful, brazen, egotistical effrontery are preying upon the weakness and ignorance of your fellowmen. The maintenance on your part of an outward attitude of condonation, apathy, or indifference to their nefarious business but assures the continued existence and growth of their practices.

A large proportion of even the enlightened nephews and nieces of our Uncle Sam seem wholly unable to distinguish between the efficiency, skill,

and ability of the man who has spent six weeks to three months in preparation for his practice and the man who has spent eight, ten or even fifteen or more years as well as thousands of dollars in the expense of preparation. They both bear the distinguished title of "Doctor," and the former frequently receives the preference because of the blatant and almost omnipotent claims, loudly, persistently and insidiously proclaimed to the suffering and gullible public. In other words, the former reaches the public ear, because of his persuasive ballyhoo and psychological advertisement. The number is almost endless who cannot distinguish between truth and error in this regard, especially if error is clothed in some of the sham habiliments of truth and loudly proclaimed. It was Mr. Barnum who perceived the fundamental though sad truth when he said, "There is a sucker born every minute." This means sixty every hour, fourteen hundred and forty every day, and more than a half million every year. These when added to last year's crop and the crops of many former years, plus the near suckers whose name is legion, makes it absolutely certain that the quacks may be assured of an abundant field for continued quackery.

Of course, we recognize the fine principle of ethics of your profession which forbids personal advertising, and we do not even suggest the decency of any departure from this fine code of ethics, but surely a great and learned profession ought to be able to come to the rescue of the thousands of misguided people who are not only being exploited financially but who are the victims of a condition which permits disease and suffering to go unchecked, and which as a consequent necessity brings multitudes to an untimely grave. At the same time, general, mental, moral and physical health conditions are lowered and there is a great hindrance placed on our economic and industrial well-being while the safety and highest good of all other citizens who live in the same community and state are consequently endangered. Fake doctors and medicines advertised in papers, itinerant and permanently located mercenary quacks are operating right here in our various communities,—"*pathies*", "*isms*" and "*practors*"!

There is nothing more needed today than a positive, vigorous, affirmative and intelligent, persistent onslaught on the forces of ignorance, superstition, and degeneracy, already referred to. The ridiculous pretense and almost idiotic absurdity of the claims and practices of those who profit

by capitalizing the ignorance and misguided credulity of so many of our people would be far on the way to annihilation and oblivion if they were only constantly held up to the ridicule which they so richly merit. Error properly laughed at is frequently and effectively vanquished, and in its place truth and reason are placed upon the throne. It is truly tragical, indeed, that the struggle from darkness to light is a long and tedious one. Its pathway is beset by many tragedies, failures, heartaches, sorrows, Gethsemanes. Yet the star of promise shines brightly. Its beckon not only lures us forward and upward, but cheers the sometimes weary pathway with rich blessings and compensations, and ultimately crowns honest endeavor with its true reward. Happy that day when such a measure of intelligence shall illumine the minds of human kind; that its light and warmth may cover the land like a divine benediction. Happy the day when ignorance, prejudice, bigotry, superstition and lethargy may be so far effaced that we may order our lives, mentally, morally, spiritually, as well as physically, in the light of truth, and that we may march in harmony with the immutable laws of the all-wise Author of the universe. Thrice happy the day when the supreme business of your great profession may be to keep human kind well instead of endeavoring to repair them after they have become ill. Glorious, indeed, will be the dawn of that tomorrow whose rising sun looks upon the achievements of a great profession whose greatest concern and highest ideal shall be to maintain, foster and preserve the continued well-being, the normal vigor of health, undimmed and unsullied by the many ills to which mankind now is required to bow because we have not yet quite reached that wonderful day. We bespeak for your great profession, achievements tomorrow which are today but the vision of your fondest dreams. We love you for what you are, but we love you yet more for what you are going to be in that glad tomorrow.

In conclusion may we not hope for each other that we may all have a firm and abiding courage amid the tempests of the changing years; that with the dawning of each new day we may lift our eyes from the earth, and at eventide that we may never forget the uses of the stars. Amid the clamor of the world may we walk calmly in our path, guided by the light of the loftiest ideals, ever mellowed by the kindly light of hope. May we ever have friends, and dear ones, who will love us for what we are; and when the race is ended and we face the vision of our sun dipping into the horizon of the unknown, whether our names are on the lips of men, and with their loving applause and acclaim, we sail grandly into the harbor of our fondest dreams, or whether we pass quietly and unnoticed into that tongueless silence of a dreamless dust, may the evening's twilight find us gentle still.

THE JOURNAL of the

Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

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EDITORIALS

DENTAL HYGIENE

We are beginning to believe that there is a good deal of truth in what some of the progressive dentists say concerning the inefficiency of dental hygiene as ordinarily practiced and even endorsed by many dentists. The fault to be found with the ordinary methods of cleansing the mouth, as pointed out by Joseph Head in *Virginia Medical Monthly* for June, is that it does not remove the infection from between the teeth and the surface of the gums. Detention of the bacteria between the teeth results in the formation of an infective or pyorrheal pocket, with gradual inroads and an extension of the disease process to the deeper gum structures and later the formation of root abscesses. Aside from the fact that this infection may result and probably does result in a loss of teeth, a more important complication is the absorption and development of disease processes in remote portions of the body through the effect of the toxemia. Cleanliness would have prevented all of this trouble, and if the spaces between the teeth had been cleaned the cavity on the side of the tooth would not have occurred. Prophylactic treatment consists of proper cleansing, and this means not the ordinary scrubbing with tooth brush and tooth paste, but the removal of the infected masses from between the teeth with dental floss, followed by thorough massage of the gum tissues with a reasonably stiff brush and any good alkaline tooth powder or tooth paste. The brush should be used not only in a rotary but in an up and down and sideways movement. This brushing, at least twice a day, should be rather vigorous, even to the point of having rather sore gums for several days after inaugurating it. At least twice a year the teeth should be carefully inspected by a competent dentist and prophylactically cleaned and treated by him. Such attention will go far toward preventing the development of the extension of infective processes in the mouth, and systemic disturbances through absorption of mouth infection.

BANANAS AS FOOD FOR INFANTS

The banana as food for healthy infants and young children is the title of a paper in the *Ca-*

nadian Med. Assoc. Jour. for February, 1929, in which it is stated that the ripe banana provides a useful substitute for other foods of its class for healthy infants. In the investigation reported, the banana was substituted for certain articles of diet which included sugar, potato and cereal. These foods are, for practical purposes, carbohydrate foods containing small amounts of protein and traces of fat. The bananas were selected carefully and used only when ripe. The fruit was kept at room temperature and not in a refrigerator room, and was considered ready for use when brown spots appeared on the skin and there was complete absence of any green on the skin, even at the tip. Ripened in this way and to this degree the starch of the bananas is practically all converted into sugar. In the case of infants of from three to six months the banana was mashed finely, and incorporated in an emulsion of the milk formula. In the diets of the older infants in which banana replaced cereal or potato, it was mashed finely and fed as such. Infants fed on bananas as substitutes for these foods take it well, digest it satisfactorily and show no change in the character of the stools. Their gain in weight over a period of weeks is equal to the gain made by those on the control diet. A point of importance in the whole discussion is that bananas should be ripe, and that fact is worth preaching to others who yield to the general desire of children to eat bananas. We can remember when many physicians made it a universal practice to tell mothers that their children should *not* eat bananas because they were hard to digest. All kids like bananas and investigation seems to show that if the bananas are eaten when ripe they not only are harmless but are an admirable food.

PHYSICAL THERAPY TRAINING

The American College of Surgeons is making some very pertinent suggestions concerning the practice of physical therapy. It is recommended that physical therapy should be under the direct control and recommendation of medical men, and that those taking training in physical therapy should be graduate physicians. Until recently there have been no recognized facilities for the training of physicians in physical therapy in an accredited medical school. Nearly all of the instruction has been given under the auspices of manufacturers, or physicians having strong commercial instincts, and in consequence a very valuable form of treatment when intelligently employed has become altogether too greatly discredited. Recently, the Northwestern University at Chicago has inaugurated a postgraduate course in physical therapy which has the approval of the American College of Surgeons. The course requires approximately thirty days, and is adapted particularly to hospital requirements. Although it is not possible in a short period of one month to cover all

phases of physical therapy, in both theory and practice, it is believed that any physician who proceeds intelligently after he has had this course will be able to render very valuable services to the hospital and to the members of the staff of any hospital. It has been suggested that for small hospitals the roentgenologist may take a physical therapy course and assume the directorship of the physical therapy department in addition to his other duties. If a physical therapy director is not chosen from the hospital, it is often quite possible to secure a good man from the ranks of the graduate interns. The point is well taken that physical therapy is a very valuable adjunct in the treatment of many abnormal conditions, but the treatment should be intelligently employed and this requires the services of one who has been trained specially in physical therapy work.

BUSINESS OPPOSES QUACKERY

High praise should be given the Indianapolis Better Business Bureau for its efficient work in ridding the city of the Indianapolis Cancer Hospital, an institution that has been "a disgrace to the community" for approximately twelve years. Many complaints have come to the Publicity Bureau of the Indiana State Medical Association concerning the activities of this institution and through the cooperation of Robert H. Bryson, postmaster of Indianapolis, many persons who have inquired concerning this hospital have been told of its methods and hence have saved their money. However, had not the Better Business Bureau interested itself in bringing charges against Charles C. Root, the medical director of this institution, before the State Board of Medical Registration and Examination, the Indianapolis Cancer Hospital would be doing business this very minute in the same old way at the same old stand, 538 West New York Street.

The profession knows, too, that if any medical organization had brought the charges, the cry "persecution" would have been raised, but with a detached and disinterested party such as the Better Business Bureau taking the initiative the entire matter received whole-hearted public approval. The Better Business Bureau spent more than \$1,000 in the prosecution of the case.

During the hearing Alvah Rucker, the attorney for Doctor Root, criticized the Better Business Bureau for handling the case, saying that it was not in the province of the Better Business Bureau to interest itself in medical or professional matters but it should confine its activities strictly to business matters. How could the citizens of Indianapolis be better served than by an intensive campaign on the part of the better Business Bureau to drive quacks from Indianapolis? It goes without saying that pretenders such as the Root institution take thousands of dollars from the pockets of Indianapolis citizens each year.

When the state board revoked Dr. Root's license he said he would appeal his case and battle the Better Business Bureau to the end. Despite this statement, shortly after the medical board had revoked his license, the Better Business Bureau is reported to have received a call from one of Dr. Root's creditors as to his whereabouts. Upon investigation by T. M. Overley, manager of the Better Business Bureau, who carried on the battle before the medical board against Dr. Root, it was found that the Indianapolis Cancer Hospital was closed and Dr. Root had moved out, bag and baggage.

The work of the better Business Bureaus throughout the United States has been approved by the medical profession. The Council and the Executive Committee of the Indiana State Medical Association have gone on record recommending that the medical societies in the various cities of the state join their own local Better Business Bureaus.

Hence, the Publicity Committee of the Indiana State Medical Association extends to Mr. Overley its approval and expresses its appreciation of the fine work done by the Indianapolis Better Business Bureau and urges its support by the Indianapolis Medical Society and the individual physicians of the city. It also wishes to repeat the recommendations of the Executive Committee and the Council that the physicians in other cities of the state join their respective Better Business Bureaus.

BUSINESS VIEW ON PATERNALISM

Comments by medical writers and expressions published in medical journals relative to "State Medicine" are interesting and timely, but similar expressions in business publications are even more interesting and illuminating.

Some time ago, the *Chicago Journal of Commerce*, perhaps one of the leading financial and commercial periodicals, carried an editorial concerning the Sheppard-Towner Act and its significance as an example in paternalism. That editorial read as follows:

"The children's bureau of the department of labor is now preparing its campaign for a renewed extension of the Sheppard-Towner government medicine act, the authorized appropriations for which will expire June 30, 1929. At the next session of congress a drive will be made for renewed appropriations.

"It is the purpose of the paternalists and bureaucrats to make the Sheppard-Towner government medicine act a permanent piece of legislation, and to keep the federal government forever in the business of paying money to the states for local medical and nursing work.

"The Sheppard-Towner act is called a maternity and infancy act. It has been represented as an invaluable aid to mothers in childbirth and to infants under one year of age.

"But in fact the operations of this law are not limited in this fashion. Instead they cover a large part of the general field of medicine and medical research. The Sheppard-Towner act is the formidable beginning of a comprehensive system of government medicine.

"For the fiscal year 1927 the federal government paid to the state of Kentucky the salaries of a state health officer, a health director, an assistant director, a clinical instructor, a chemist for water and milk supply, an inspector of birth registration, an educational instructor, a stenographer, a bookkeeper, and six clerks.

"In Georgia the federal government paid for the distribution of free diphtheria toxin-antitoxin to clinics for the immunization of children under seven years of age. This was a highly valuable work. But it certainly violated the promise that the Sheppard-Towner act would be used only for the benefit of mothers in childbirth and of children under the age of one year.

"In Colorado the federal government paid for what has been described as 'special work' with the boys' and girls' clubs at the state fair.

"In California the federal government paid for the distribution of pamphlets dealing with tonsils and adenoids.

"In Iowa the federal government paid for dentists and nurses in dental conferences and clinics for children up to seven years of age.

"In Maryland the federal government paid for a survey of crippled children.

"In New York the federal government paid for an orthopedic clinic consisting of a traveling unit comprising two orthopedic surgeons, eleven field nurses, and one muscle-tester.

"These are only a few of numerous items showing the extent to which the federal government's money, under the Sheppard-Towner act, is being employed not only to lessen the deaths 'connected with childbirth, and among infants under one year of age', which is the professed purpose of the act, but for health work among children in general, including work in boys' and girls' clubs.

"What is being done in the case of children can readily be done in the case of adults. A bureaucracy tends to exalt itself by extending its power. The Sheppard-Towner act is the well-defined beginning of a general system of federal government medicine. It is paternalistic, it is bureaucratic, and in sober truth it is socialistic.

"If socialism can be applied to the medical profession, it can be applied to other professions and to business in general.

"When the proposal for another extension of Sheppard-Towner appropriations is made at the next session of congress, it ought to be defeated. It probably will not be. Masked socialism is not encountering many defeats in the United States. It is winning again and again, because business

is asleep."—Editorial—*Ohio State Medical Journal*, June 1, 1929.

MEDICAL PROGRESS IN AN ECONOMIC WORLD

In an article on medical progress in an economic world, Dr. Ray Lyman Wilbur, former president of the American Medical Association, president of the Stanford University, and now a member of Hoover's cabinet, starts out with the statement that "The saddlebag age of medicine has passed, but saddle bag thinking on the part of the profession and the public is still with us." He shows that we live in an economic age, but that medicine as an organized profession does not fully realize it. "A modern business has its statisticians and its economists surveying the past and present and preparing for the future. Medicine stumbles ahead as a great social factor, led by a few far-seeing individuals, prodded by a lot of uplifters, legislators and enthusiasts, and with a well developed defense complex against those changes which come to all growing things." The warning is sounded that "unless the profession stirs itself, great changes in medicine will take place through the instigation and pressure of outsiders. The golden thread of human understanding and of close personal relations between doctor and patient may be left out of the new social fabric which is being woven right under our eyes. We must face the facts. We must study them to see what they mean. We must guide ourselves by what they tell us, not by traditions and thinking that belong on the retired list. We cannot escape change. The question is, are we going to guide it? Many proposals made are not socialistic or bolshevistic. They cannot be quieted by slogans or personal attacks on the experimenters. How can we keep that independence which is essential in the life of the physician and also that close personal relationship between doctor and patient which is vital to successful care of a large proportion of human ailments? Some plan must be devised so that official snoopers will not be injected in between doctor and patient. The physician must show that acute and yet conservative responsiveness that is the basis of the rapid progress of medicine as a science in the development of the practice of medicine in an economic world with due concepts of government, social organization, publicity, and education combined."

The writer then goes on to say that there have been very large contributions and endowments for medical service but very few of these take the form of payments for services rendered by the physician. It is quite clear, too, that the large proportion of our population, made up of people of moderate means who desire to meet all of their obligations, find it difficult if not impossible to carry their families through periods of illness.

There is a gradual encroachment in various directions in the field of medical practice which takes the form of group practice, public clinics, pay clinics, organization of hospital and medical services by great conservation enterprises such as the railroads and industries, student health services in the universities, benevolent societies with hospital privileges, and public health is constantly extending its range. There is no common program, no studentship, no strategy—simply the field is gradually being occupied with much overlapping and much dissatisfaction. Dr. Wilbur says that it is the recognition of this jumbled state of affairs that has called forth the organization of the committee to study the cost of medical care, and this study will embrace a period of five years, at the conclusion of which it is hoped that a program may be developed which will be based on established facts.

THE BUREAU OF PUBLICITY

THE editor of one of the prominent daily newspapers in Indiana has informed us that he considers the bulletins issued by the Bureau of Publicity of the Indiana State Medical Association as containing more trustworthy and useful health education than anything that can be brought before lay readers. At first he was skeptical as to the real reason for releasing such articles under the sponsorship of our Association, but after noting the releases week after week, and month after month, he says he has come to the conclusion that the Bulletins are very valuable for the public, and he takes pleasure in publishing them in his newspaper. We also have heard various favorable comments from lay readers concerning appreciation of the bulletins of the Bureau of Publicity.

We mention this subject because within recent weeks one or two physicians have criticized the Association for going to the expense of maintaining a Bureau of Publicity which they consider of questionable value. To our notion one of the most valuable features of the constructive work done by our Association is the creation and maintenance of the Bureau of Publicity with its splendid educational work. Furthermore, it should be remembered that the expense is nominal, and the prominent medical men of Indiana who compose the Bureau of Publicity and who devote hours and hours of their valuable time to the work, are receiving no monetary compensation of any kind whatsoever and certainly no publicity.

It is unfortunate that some of the members of the Indiana State Medical Association do not know and do not try to find out how much time and trouble is devoted to constructive work for the benefit of the medical profession as well as the public by those who comprise the officers and committeemen of the Indiana State Medical Association. These men, to the number of two score or

more, are working for the common good, with little or no thought of reward of any kind but from a sense of duty as well as love of the work. They deserve highest praise and we think they receive it except from the unthinking.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve *you*.

It is not too early to plan to attend the Evansville session. Remember the dates, Wednesday, Thursday and Friday, September 25th, 26th and 27th.

WE have received a little card which says, "Better Health Pays. Men have found that it pays to have automobiles and other machines regularly inspected by an expert. Why not do as much for the human body? Get a Health Examination *Before* Your Next Birthday!" These cards are intended to be inclosed with statements and other correspondence sent to patients. Not a bad idea, even if it did originate with a pharmaceutical house.

INDIANA physicians are being solicited for patronage by some of the cut rate laboratories of Chicago. We are not "knocking" any particular laboratory when we say that on general principles we have little respect for the trustworthiness of cut-rate work of any kind. We seldom have found anything that was cheap in price that was not cheap in quality, and it does not make any difference whether the commodity purchased is service, drugs, food or wearing apparel.

A WELL-KNOWN dietitian says that the reason why whole wheat bread is not more popular is because of the opposition of millers who do not like to change their methods of flour making, perhaps with great monetary loss. However, the point has well been taken that many of our food refining processes have been detrimental in the sense that the food value has been reduced by the refining process. If whole wheat bread is as valuable as it is said to be, then the American public should make such a demand for it that manufacturers will have to supply the demand.

SOME of the manufacturers of physical therapy apparatus are advertising and selling their wares to the public. That this will redound to the discredit of the apparatus is a foregone conclusion, for when it becomes generally known that harm comes from the indiscriminate use of ultra-violet radiation and other forms of physical therapy apparatus the pendulum will swing to the point where the public as well as the medical profession will revolt. Physical therapy is valuable when properly used, but the best way to kill its usefulness is to countenance its indiscriminant employment.

THE daily press, under date of June 18th, is responsible for the statement that some of the officials of the Methodist Episcopal Church are so interested in the enforcement of prohibition laws that they have justified the killing of innocent persons by prohibition agents. Perhaps they call that religion, though if we remember rightly the Ten Commandments are supposed to be a part of the creed of every religious sect. We believe in religion and support it, but not the kind of religion that justifies killing people because they do not believe as we do or act as we would like to have them act.

It may be interesting to know that the United States government since the passage of the Food and Drugs Act became effective in 1907, has entered legal action against 181 so-called "cures", "remedies" and "treatments" for tuberculosis, and judgments to the number of 358 have been issued against the 181 so-called "cures". There are a great many other advertised proprietary remedies that are just as detrimental as the tuberculosis remedies and cures and which should receive consideration at the hands of the government. It may be taken as a reasonable certainty that any well-advertised remedy or cure is a fraud or near-fraud.

THE Benton County (Indiana) Medical Society presented a plan to the county board of education of Benton County in which the members of the medical society proposed to examine each school child for one dollar per head, and keep a record of the examination. Most of the trustees were opposed to the plan for the reason that it would cost some money, and, as usual, medical men are expected to render their services gratuitously. When medical men arrive at the conclusion that their services are worth something and insist upon being paid decent compensation for their services, then and then only will the public be willing to pay for the services now received gratuitously.

IN a paper on postoperative pulmonary complications, H. K. Sowles, in the *New England Jour-*

nal of Medicine for May 9, 1929, says that in surgical cases you should do everything possible to avoid those things which can produce a slowing of the peripheral pulmonary circulation. This means careful choice of the anesthetic to be used, avoidance of surgical shock, which means the avoidance of unnecessary prolongation of the operation, unnecessary trauma and unnecessary loss of blood, conservation of body heat immediately following the operation, and, finally, the post-operative patient should be turned on his side promptly when he arrives back in bed, as this position allows a more free exchange of air and a more complete expansion of the lower lungs.

VACCINATION for smallpox, diphtheria, or scarlet fever should be performed in the approved way in order to secure trustworthy results. Unfortunately there are a few physicians who cater to the anti-vaccinationists and Christian Scientists, and even in the face of an epidemic will slight vaccination work and admit it. Very naturally if such deception is followed by the development of the disease for which the vaccination is practiced as a preventive measure, then vaccination gets a black eye unjustifiably and unnecessarily. We have in mind the cases of smallpox that have developed in spite of a recent so-called vaccination. Our candid belief is that the patients were not vaccinated in the proper way or they never would have contracted smallpox. Members of the medical profession have a great responsibility in this work of disease prevention, and they should do prevention work in the most approved manner.

THE Indiana State Medical Association is and always has been well managed. Its dues are less than the dues of the medical associations of many other states, and yet no state association furnishes more for its members. If it did nothing more than furnish medical defense for its members it would furnish something well worth the amount paid in dues, but in addition it pays the expenses of an annual session, conducts a bureau of publicity that is of inestimable value to the public, furnishes its members with a live and progressive medical journal, and maintains a central office with an all-time secretary to assist in organization work, postgraduate service, and in fact furnish assistance of various kinds to the medical profession of the state individually and collectively. The member who does not appreciate this service and really feel that he is getting his money's worth, ought to divorce himself from medical organizations of every kind.

ONE of the Indiana county medical societies that ordinarily has an attendance of from six to ten at its regular meetings, announced that one evening would be devoted to the discussion of a movement to discipline one of its members. The

entire membership of more than fifty turned out to a man to take part in the proceedings. Two or three of the men hadn't been seen at a meeting of the society for a period of four to six years, and the majority of them limited attendance to dinner meetings or meetings when trouble was brewing. What a fine commentary upon interest in medical society work, and in fact, in progressive medicine. It cannot be said truthfully that the men who stay away from medical meetings do so because they think they cannot learn anything, for usually the fellows who stay away are the ones who need knowledge most. They also need to have knocked out of them a little of the spirit of rivalry and petty jealousy that does so much to destroy a physician's usefulness to his community as well as to the profession!

THE *New York State Journal of Medicine* accepts considerable advertising that our national journal and the majority of the state medical journals will not accept because they consider such advertising to be misleading if not actually deceptive. Why talk about ethics and propriety in medical journalism or in the practice of medicine when one of the influential state medical journals comes so far from living up to high standards? It would be interesting to know just what the majority of the reputable medical men of the state of New York really think of the policy of their state journal, but the only way that a definite opinion could be obtained would be through a referendum vote, and probably such a measure would be frowned upon and prevented by those who control the destinies of the journal in question. We happen to know that some of the high grade medical men of the state of New York are ashamed of their state journal, but their opinions do not seem to count when it comes to maintaining a creditable advertising policy.

THE anti-vaccinationists seem to be rather strong in England, and in consequence the health authorities there are having considerable difficulty in suppressing a smallpox epidemic. The disease seems to be in mild form, but it has the possibility of greatly disfiguring its victims if not taking life. Unofficially, the French authorities attempted to prevent English travelers from coming into France unless they could show evidence of recent vaccination, but the order was not enforced. What a pity that the order was not official, even though it meant a great reduction in the tourist traffic between France and England. Nothing brings an anti-vaccinationist to time quicker than a dose of smallpox or restrictive measures to protect others and at the same time inconveniencing the anti-vaccinationists. We have no fault to find with any sane person of legal age who conscientiously objects to vaccination and refrains from having such a preventive measure used upon him, but he has

no legal or moral right to jeopardize the health or interests of anyone else through his vagaries.

WE have been hearing much about milk as a conveyor of disease germs, and within the last year or so there has been much discussion concerning milk as the conveyor of the germs producing undulant fever. Some of the earlier investigations concerning this subject were made here in Indiana by members of our Indiana State Board of Health. Now comes the *Journal of the A. M. A.* for March 16, 1929, with the suggestion that perhaps the pig rather than the cow is responsible for undulant fever in this country, and that possibly the milk yielding goat and cow can be absolved from responsibility for many cases. This opinion is based upon the investigation of a few Connecticut cases at the Yale University School of Medicine which seem to incriminate the pig as the cause of the disease which presumably is contracted through handling fresh pork products in a slaughter house. It is suggested that the subject be investigated and studied with great diligence in order to arrive at trustworthy conclusions. Milk as a medium for the transmission of infection bears enough responsibility without unduly adding to the crimes charged against that peerless food.

WE used to talk about physicians driving "flivvers," but "flivvers" are a thing of the past for the average physician who desires and manages to get something better. It is in keeping with the general demand for more luxuries on the part of the people in all walks of life. Investigation does not seem to indicate that the income of the average physician has kept pace with the increase of income of those following other vocations, and hence the luxuries just about swamp him. However, despite his lack of business ability and carelessness in providing for his own economic advancement, he manages to make both ends meet some way and seems reasonably contented with his lot. The explanation is easy to find. The average physician loves his work, and it is his joy in work that causes him to overlook to a very large extent the purely business side of the practice of his profession. The time is rapidly approaching when he will be forced to pay more attention to the economic phase of his work, but until he begins to feel the pinch of the struggle to make both ends meet he will rest content and do nothing to save himself.

A HOSPITAL superintendent, in commenting on the fallacies pursued by the average hospital now days, writes us as follows: "Personally I feel that the hospitals should go back to an old method used before the war wherein the senior nurses in the institution were assigned to cases wanting hospital nursing care which I feel was indeed adequate for the patient at a very low cost. \$42 per

week for nursing care, which I believe the hospital could give at \$15, would help materially in the cost situation. Of course this would bring out quite a yell from the alumni associations of the different hospitals because the nurses were not getting work. Quite a few of these graduates that I have seen, give the patient's morning bath, the usual medication, then sit at the bedside and read and do some sewing, then insist on hours off from one to five every afternoon while the relatives of patients take the part of a nurse in the interval, and I do not honestly see \$42 worth of honest-to-God service to the patient."

Certainly in studying this question of the cost of medical care there are many angles, and it cannot be said truthfully that what is paid to the attending physician is the stumbling block to a lessening expense of sickness.

OUR everyday life in cities is so upset by the confusion and noise of traffic, telephones, fire-engines, railroad trains and many other nerve-racking features connected with business that it seems as though we ought to have some peace at night even though we patiently tolerate noise during the day. However, restful repose is not to be had when locomotives with their clanging bells, shrill whistles, exhaust steam, and other noises keep up an infernal din all night long in those cities that are blessed with numerous railroad lines. It strikes us that the health and comfort of the people should receive some attention, and that either state laws or city ordinances could prevent many of the unnecessary and nerve-racking noises that occur during the night even if they cannot be suppressed during the day. Three or four switch engines in various parts of a populous city can make the whole night hideous for all the inhabitants by noise that should be suppressed. Automobile joyriders, who at all times of the night think it is great sport to keep their automobile horns going, and drive with the exhaust open, ought to be fined and imprisoned. God bless the city that enforces an ordinance requiring the suppression of unnecessary noise during the night hours when people are trying to sleep. If one of the cities starts the ball rolling others will follow.

MEDICAL Chicago has quieted down, following the hysteria occasioned by the expulsion of Dr. Louis E. Schmidt from the Chicago Medical Society. As might be expected, the lay press, without knowledge of the principles involved in the controversy that led to the expulsion of Dr. Schmidt, was loud in its denunciation of the Chicago Medical Society and the code of ethics which required such stringent action. In the final analysis it will be found that Dr. Schmidt has received a good deal of publicity whether desired by him or not, which will redound to his advantage in more ways than one. He has been ex-

tensively advertised as a man of parts, and of course as one greatly sinned against. The latter in itself would be sufficient to gain for him further prestige and patronage, but what that hasn't done, general advertising has accomplished for him. Had he actually spent a half million dollars for publicity he couldn't have procured as much favorable publicity, with its probable returns, as was secured from the accounts published in lay papers concerning the controversy with and eventual expulsion from a reputable medical society. From the standpoint of the medical profession, the action of the Chicago Medical Society was justified and in thorough keeping with the intent of every reputable medical society to enforce decent respect for the Hippocratic oath and the code of ethics governing our conduct. The lamentable phase of the situation is that the medical profession has to suffer criticism at the hands of the lay press for its justifiable right to purge itself of undesirable members.

SIR WILLIAM ARBUTHNOT LANE, one of Britain's foremost physicians and surgeons, tells in a special article to the *New York Times* of April 7th that thousands of lives might be saved every year if doctors concentrated on preventing disease instead of trying to cure it. It is his opinion that to a certain extent medical science is a failure because physicians treat end results, or in other words they wait until a man is sick before treating him instead of taking him in hand while he is well and teaching him how to keep in good health. So long as medical science follows these lines, it never will win the battle against disease. The physician of the future will teach people how to live and what to do to avoid disease. He believes that in the future people will visit their doctor three or four times a year and receive such instruction as seems necessary in order to prolong their lives. He believes that the only cure for many diseases is prevention, and that preventive medicine is the medicine of the future.

We quite agree with what Sir William Arbuthnot Lane has to say, for we believe that he is correct in his prognostication, and we respect his judgment. In fact, we even agree with him in a statement credited to him to the effect that American girls have the prettiest legs in the world, although we often have wondered just why so eminent a medical authority should have taxed his eyesight in comparing female legs. Perhaps the next thing in order is for him to espouse the cause of fewer clothes as an aid to the prevention of disease, and even in that we think he would be quite correct, for there is no doubt that overdressing, like overstuffing with food, is accountable for many of the ills of mankind.

IN view of the fact that the Indiana State Medical Association furnishes medico-legal defense in malpractice suits and does it exceedingly well and

at a very nominal cost, we believe that it is well to repeat what an insurance company furnishing medico-legal defense in malpractice cases has to say by way of suggestion to all physicians, surgeons and dentists. The notice follows:

1. * Make no admissions of liability on your part. Let your responsibility be determined by legal standards.

2. Refrain from making remarks about any other doctor's work. Without doubt this is a common source of instigating malpractice litigation, and most such remarks are thoughtlessly made.

3. Keep accurate records of the dates and nature of all treatments rendered. This is essential to refreshing your memory of a case and aiding in the defense. Suits might arise many years after services rendered.

4. The importance of x-rays in the diagnosis of any possible bone injury, and before and after reduction of fractures, cannot be overemphasized. It is becoming increasingly difficult to defend any such cases without full x-ray records.

We might add to this the observation of the representative of the insurance carrier to the effect that every malpractice case has two physicians back of it—first, the one being sued, and second, the one who is inciting the suit through a thoughtless remark, or intention to stir up trouble for a confrere. The further suggestion may be offered that no doctor can expect to escape criticism and perhaps necessity of defending himself in a malpractice suit if he does his work carelessly or neglectfully.

COMMENTING on the increased cost of medical care, the president of the Ohio State Medical Association, in his annual address delivered at the Cleveland session, May, 1929, says, "America is an industrial nation where mass production in many lines has largely replaced individual output. This form of increased output and a lowered cost may be applied advantageously to many items. It does not find so ready applicability to medical service. So long as the people demand the services of men of long training more or less specialized in their particular type of work, and this is what the people are demanding more and more, especially in the larger centers of population, they must expect to pay the higher cost of such service. Long training and specialization are expensive undertakings and are attended with an increased overhead. Probably there has been too much demand for this type of service and consequently the cost of the care of illness has increased."

There is no question but that modern care of illness has demanded certain medical luxuries that have come to be looked upon almost as necessities, just as this same feature has been noted in our ordinary, everyday life. Luxuries add to the cost of maintenance, whether they be items such

as automobiles, fur coats and jewelry in everyday life, or unnecessary consultations and examinations by specialists, unnecessary laboratory and x-ray work and unnecessary nursing care, or social service investigation during the period of illness. All of these items seemingly add to the peace of mind or sense of well-being in the individual, so naturally he wants them whether they are in reach of his means or not.

THE New York State Department of Health, in a radio talk, said "The child or adult who craves ice cream this summer may consume this frozen delicacy as eagerly as he likes, for pure ice cream is a healthful and nutritious food. Liberal amounts of good ice cream are, in fact, actually beneficial to most children and grown-ups. The basis of ice cream is cream, the butterfat of milk. In the modern manufacture of ice cream the cream is usually pasteurized and homogenized, practices which make it safe from the standpoint of bacteria, and more digestible because of the breaking up of the fat particles. To this cream is added sugar and flavoring material and the mixture is frozen. Ice cream should not be looked upon merely as a luxury or sweet, but is a food which may occupy a legitimate place at any meal. Ice cream is beneficial to all persons except sufferers from diabetes who generally are forbidden to use any sweets. It is not indigestible, especially when eaten slowly, and it certainly is one of the most appetizing of all dietary articles."

Were it not that we have heard many mothers say that the family physician has advised them *not* to give children much ice cream, particularly when sick, we would not waste time and printers' ink on this subject. Ice cream is not only a food but wonderfully soothing to the throats of children who are suffering from tonsillitis or who have had tonsil and adenoid operations, and yet only recently we have heard that two family physicians have forbidden ice cream to children who have had tonsil and adenoid operations and who not only would appreciate the soothing effect of the ice cream but be benefitted through the nourishment afforded. Of course, it goes without saying that the ice cream must be clean and pure, and it must conform to standards of sanitation similar to those set for milk and other perishable foods.

SOME one has said: "Be good and you will be lonesome." We contend that there is little incentive to follow the straight and narrow path in the practice of medicine unless one is possessed of a conscience that is working all the time. We are reminded of this by a statement of a quack, advertising blatantly in the lay press, who says that figuratively speaking he starved to death before he began quacking. He now says that as long as he refrains from making rash promises he can get all the newspaper support that is needed, and that

neither medical profession nor lay organizations will attempt to curb his operations as long as he has the support of the lay press which he considers all-powerful.

What we cannot understand is why the Better Business Bureaus, the societies devoted to truth in advertising, and better business interests in general, do not see the necessity of suppressing medical frauds as an economic measure for the communities where such frauds thrive. Merchants must know that money taken from the people by swindling games, and usually practiced upon those who can least afford it, takes just that much money away from the legitimate business enterprises of the community. The lay press is little interested in suppressing medical frauds for the reason that those frauds are willing to pay the lay press extravagantly for publicity, and the advertising manager of the average lay newspaper or magazine invariably is looking for profit and is not going to be very critical as to how he obtains it. However, the merchants who suffer indirectly through medical frauds could stop medical advertising if they combined in their influence by threatening to withdraw their own advertising patronage from lay newspapers and periodicals unless the advertising of medical frauds be refused. In the final analysis, the medical frauds would be suppressed if their advertising were suppressed, for the only way that they survive at all is through publicity, and the established fact that a sucker is born every minute and sometimes two are born in a minute.

THE grocers of Indiana now are distributing to their patrons some circulars that spread a deceptive propaganda in that they advertise Kaffee Hag as "a real coffee minus the drug caffeine." The circular is headed by the statement, "Now you can drink all the coffee you want and sleep." Further on the circular says that Kaffee Hag is not a substitute but a real coffee, of which you may drink as many cups as you desire for it contains no caffeine (specifically the manufacturers say that ninety-seven percent of the drug caffeine has been removed) and that caffeine is the sole disturbing factor in coffee.

Last year the chemical laboratory of the American Medical Association made an analysis of the so-called decaffeinated coffees and reported that Kaffee Hag, prepared according to the directions of the manufacturers, contained approximately three-fourths of a grain of caffeine to the cup. Following the publication of this article, the method of extracting the caffeine from the coffee evidently was changed or improved upon, and later examinations of specimens purchased in the open market showed a lessened caffeine content, but, as the report of the A. M. A. says, "It is advisable to think not in terms of percentage of caffeine removal but in terms of the amount of caffeine per

cup. If the product used is consistently decaffeinated from batch to batch (questionable) it is unlikely that caffeine in amounts less than one-half grain per cup will produce a caffeine effect in the adult, *provided not more than one cup is taken at a meal.*" However, the advertising distinctly urges drinking as much Kaffee Hag as one cares to drink with no fear of getting the caffeine effect, and such statement, it seems to us, is misleading. The truth of the matter is that coffee, depending in some measure upon the strength and manner in which it is prepared, is a positive stimulant through its caffeine content. Some physicians make a practice of advising patients with low blood pressure to begin the use of coffee or to increase the consumption of coffee in order to bring up the blood pressure. It is admitted that while caffeine may be partially or even very largely removed from Kaffee Hag, yet the encouragement to drink of it to the heart's content is *not* good advice.

THE U. S. Department of Agriculture has sent out a bulletin concerning poison ivy, its recognition and treatment for the poisoned person. The bulletin suggests that "Leaflets three, let it be" is good advice for avoiding the misery caused by poison ivy, for while it may lead to avoidance of some innocent plants, it expresses a simple rule of safety and bears the indorsement of botanists in the U. S. Department of Agriculture. In autumn poison ivy may be recognized by its white, bony, berry-like fruits, in connection with its three leaflets. There are several kinds of poison ivy plants and a wide variety of local names such as poison oak, three-leaved ivy, poison creeper, oakleaf poison ivy, climbing sumac, markweed, picry, and mercury. These plants and their close relative, poison sumac, are similar in their poisonous properties. The Farmers' Bulletin (1166-F) says that "Their poisonous principle is a nonvolatile oily substance known as toxicodendrol which has such violently irritant properties that the slightest trace deposited on the skin is capable of producing severe inflammation. All parts of the plant contain the poison, even after long drying; but growth in which the sap is abundant is the most dangerous." The bulletin of the Department of Agriculture also says that all of these toxicodendrol-bearing plants, with the exception of poison sumac, are three-leaved and all have white fruits. The red-berried sumacs are harmless. For prevention, the bulletin recommends solutions of iron salts applied freely to exposed areas of the body and allowed to dry before going into areas infested with poison ivy, or applied immediately after exposure. A solution of 5 parts of ferric chloride in 95 parts of a half-and-half mixture of water and glycerine, or a solution of 1 part of ferrous sulphate in 5 parts of water, is recommended.

SECRETARIES DEPARTMENT

ANNUAL SECRETARIES' CONFERENCE

HIGHLIGHTS OF DR. HARRIS' PAPER

(Continued from the June issue)

"Medical care should be made available to all people all of the time.

"In order that the profession can fulfill its duty it must organize on an undisputed basis. County medical societies should have their own dispensaries that should be incorporated so as to have legal standing. Every member of the society should pledge himself to devote his time and skill to the work of the organization as may be equitably arranged by the board of directors. Arrangements should be made to care for patients at their homes as well as at the hospital. The charge to be made will depend on the nature of the services rendered.

"People divided into three classes:

1. Those who are able to pay all.
2. Those who are able to pay something.
3. Those who are able to pay nothing.

Classes 2 and 3 should be entitled to services of the institution. Class 2 should pay something. Class 3 should be paid for by the community.

"Under this plan the profession will fulfill its obligations to the public by furnishing competent medical care to all of the people . . . This institution will be more than self-sustaining and the surplus can be used to pay fees of those who offer services. The profession is certain to suffer by institutions organized by people outside of the profession. If the profession does not organize such institutions outside agencies will.

"The profession is feeling economic pressure greater today than ever before."

"The principles of medical ethics means that the conduct of the physician at all times should be fair and honorable and just, not only to their patients but to each other, to the profession and to the community."

DISCUSSIONS OF DR. HARRIS' PAPER

DR. PARMENTER: I was fortunate enough to hear Dr. Harris give a paper at Fort Wayne where he discussed this matter. The only thing I have to say here is that at our last meeting a committee was appointed to meet with our various charitable organizations and to arrange a plan whereby medical services would be furnished under the direction of the medical society to take care of this question in just the manner Dr. Harris has outlined to us tonight. I am glad to report this to him. Certainly his talk to us has borne fruit.

DR. MEYER: I am still in the dark as to what Dr. Harris means by a "medical institute." Should it be incorporated for \$50,000. to organize clinic? How extensive should such a clinic be? Should a staff be organized?

DR. HARRIS: Amount of capital necessary to organize this way is comparatively small. Organization consists of the county medical society. It should incorporate in order to have a legal status and should elect a board of trustees and managers. It should be entirely or almost entirely composed of medical men. It may have one or two business men. Every man in the society should pledge himself to give of his time and skill to the institution as may be determined equitably by the board of directors. The institution should have a headquarters building, properly equipped, necessary paraphernalia for making diagnoses and taking care of ambulatory cases. It doesn't require a great amount of money. A few dollars from each member of the society would be enough to equip the building for service. The board of directors would select men who stand at the head of the profession in a particular department. The board of directors selects as many men who are competent in their various departments as the heads think should direct that department. In small counties practically every man in the county could work in the institution. In larger counties they couldn't all work at one time.

This institution would be a great teaching institution, for the elevation of the standard of all of the men in the profession. A man would not have to give all of his time to the institution. And men who do not work in the institution would have the facilities of the institution and the right to send their patients there. Laboratories could be used and this would be a great advantage to the individual physicians.

Now this institution is going to make a lot of money. It isn't a charitable job. Money in excess of that needed to keep up the expenses of the organization, to make additions, to keep up equipment, etc., would be paid to the men doing the work. A lot of money that is now being lost to the profession would come into the hands of the profession.

Scrapping among the profession must be eliminated. If we can't unify for our own benefit we had better dissolve and quit. There are 15,500 doctors in the United States that are working on small salaries hired by lay institutions. Compensation companies are hiring physicians at low salaries to take care of the work. That income is being lost to the profession.

This work is a revolution in the profession but it is something we have come to and we might just as well face it. A lot of people are going without medical care because they feel they can't afford it. We have to extend the profession to them. We will have to extend it to the hospitals. We've got to organize. We've got to assume control of taking care of the sick and the medical profession must care for all of the sick all of the time. Until we do that we are neglecting our obligation.

DR. WM. F. KING: You are familiar with the five-year program, Dr. Harris, being carried out by the Committee on the Cost of Medical Care. The committee wishes to make a survey of one county in the state of Indiana. The matter is now up to the medical society of that county. I would like to have your reaction to the work that this committee is doing. Personally, I would like to see the committee make this survey in this county in Indiana.

Another question—you speak of the fact that \$300,000 have been put behind lay organizations in Chicago for the purpose of providing medical service to those who believe they cannot, or those who cannot afford medical service. Is it not true that the man of wealth interested in this subject would just as soon, or perhaps sooner, put the same amount of money in the hands of the medical profession to carry out this work as he is willing to put in the hands of lay organizations?

DR. HARRIS: This committee is working on the subject from all angles. It is trying to get data on every subject that is related to the care of the sick; fees, hospital care, nurses' services, dentistry, laboratory services, anything that has to do with the care of the sick. It is a committee that we should encourage in any way we can. It is spending a lot of money, money furnished by different philanthropies—Milbank Foundation, Rockefeller and Carnegie Foundations, financing this committee on the five-year basis. We are sending out men who are competent to do this work to investigate counties in each state throughout the whole country in order to get a cross-section of the amount of sickness which people in the different strata of life have, the amount of their doctors' bills, the amount of their hospital bills, and amounts of every kind they have paid out for a year for medical services. When we get data together we will be able to analyze it and draw conclusions. This work should be permitted to be carried on in the state. It can't possibly hurt any doctor and will eventually do us all good. *The cost of medical care as most people think, relates entirely to physician's fees, but when we get the data all together we will find that the doctor's fee in regard to total expense of being sick, is very small.*

The American Medical Association has assumed the duty of collecting data concerning the capital investment of the doctors and also the income of the doctors through the country. When we get all data in we will get an idea of what doctors in large cities, medium size and small cities and the rural districts, are earning The whole work of this committee is progressing very nicely and everyone is working to the same end—to secure reliable data on which conclusions may be drawn as to the cost of being sick and to determine just which factors are responsible for what is called the high cost of medical care so

that we may better know how to meet the situation to our advantage.

(Dr. Harris' answer to Dr. King's second question): Most certainly. I am in favor of the profession financing it itself. These philanthropists and lay organizations are pauperizing the people. If the profession will take hold of this and assume control of it, it will have all the money it needs.

DR. DAVID ROSS: What is to be the relation between the charity hospital and the third class of patients who are not able to pay anything and that of those who are able to pay in part and that of our clinical hospital?

DR. HARRIS: The organization of the hospitals is going to be quite a proposition. The whole proposition must be a matter of development. We can start an organization to take care of ambulatory cases.

DR. G. A. COLLETT: A number of the hospitals in Indiana are county hospitals. Patients pay if they can. The trustee of the county pays if they can't. Would you consider that that would be the proper workshop of the county society or should they have a separate place to work?

DR. HARRIS: If you can make suitable arrangements with that hospital, there is no objection to making that hospital the headquarters of the society. The community should pay for its county charges.

DR. W. F. CARVER: This has been a wonderful paper. I congratulate the speaker on the clarity and brilliance of it. To those of us who have been hitting the grit for a good many years, increasingly has been borne the knowledge that the profession is hitting the rocks—state medicine and philanthropist leave us very little leeway. While the idea is revolutionary it appeals to me as being the way out and I want to congratulate the essayist. It looks to me as if this vaccination will take.

DR. C. A. STAYTON: Certainly a very idealistic and beautiful thought has been given us. Just a few practical points:

1. I would like to know if there are any such clinics. Where are they? Are they open to us to visit? How are these clinics started? What is the method of administration? Is the head of the clinic a layman, a doctor? If so, how is he paid, if at all?
2. What is the source of the patients? Are they obtained from advertising? Do they come from the charitable organizations, or just how do they know this clinic is in operation?
3. Who determines if the patient shall pay and if he pays how much he shall pay?
4. How is the doctor's time allocated who serves in the clinic and does he get paid for the time he serves in the clinic or does he take the patient over more or less as a private case?
5. What steps are taken to prevent the ma-

chine type of service that is rendered in our big charitable clinics?

6. What steps are going to be taken in regard to losing the personal contact that the physician and patient enjoy when the patient comes to the doctor as a paid case? That's the biggest objection to the government's activities. Patients complain about the lack of personal attention.

DR. HARRIS: Social service departments will have to investigate the economic status of the patient. Allocation of time is going to be determined by the physicians themselves. They have elected a board of directors and this board is going to arrange the time equitably among the physicians. The personal attention given has got to depend in a way on the honor and dignity of the profession. This will be very different from government service. The man in government service has no interest in anything except drawing his salary. . . . Money is going to be prorated among the profession in the county. The society must manage it.

No clinic is organized yet on this plan, but it is being agitated all over the country. I have been in several states and have fifteen dates ahead of me between now and July. New York is very much interested in it. Every state I have been in they are interested in it. San Francisco is interested in it. I am now organizing one in one of the branches in Chicago and expect to have it running soon.

We are going to get patients from all of the doctors in the county if it's in the county. Doctors know most every person in the county. In the cities we are going to advertise ethically in the papers. It won't take long for the institution to become known.

DR. A. C. McDONALD: While in Cuba last winter, I visited the most beautiful club I ever saw. While we were going through it I asked what was the intention of it. I thought it was for very wealthy people. "No, this is for the common people." 60,000 members pay \$2.00 a month. If they are sick they are taken care of. From what the fellow said I imagine they could have any doctor they wanted. Shows the trend of things upon which Dr. Harris spoke.

DR. ROBERT SMALLWOOD: I have visited Cuba also and was interested in the pay that the doctors in these clubs received. The guide told me the doctors get the honor. I hope that that will not prevail in the United States.

DR. G. D. SCOTT: What is your opinion of the Life Extension Institute of New York?

DR. HARRIS: They threatened me with a suit for one million dollars for ruining their business. That is what they think of me.

About the Cuban situation. A man from Cuba came to Chicago and tried to organize the same thing, by establishing a health club with two classes of membership, one paying \$1.35 a month and one paying \$1.50 a month. This institution was supposed to furnish to its subscribers two

weeks' hospital care including all hospital service except the doctor who got nothing. The \$1.50 subscribers had a private room in the hospital; the \$1.35 subscribers were to have a ward bed. They got all laboratory work, food and care, for two weeks. The doctor got his pay out of the patient if he could. They had a number of hospitals on their list because the hospitals had practically nothing to lose. The only thing the hospital was liable to lose was possibility of a patient staying longer than two weeks and not getting money from patient. After a short time the institution sent out word that it would not pay any more hospital bills. In other words, it has gone broke.

DR. JAMES B. MAPLE: We have a county hospital and the medical society is the staff of that hospital. We know practically everybody who comes into our hands. If they can't pay the law of this state provides that trustee decides who is to pay. We take care of everybody who is sick in our county. We are slowly educating our trustees that if the patients are not able to pay, the trustee should pay the doctor's fee. I wonder how your plan would apply to a place like ours. The physicians of the county are not in charge because the law specifically states that no physician may be on the board.

DR. HARRIS: All you have to do is to educate your county commissioners to pay you for your services.

DR. F. W. CREGOR: This is wonderfully interesting to me. We couldn't have had a meeting like this a few years ago. This suggestion of Dr. Harris is not a revolution to me. I have sat on the Council of the American Medical Association with Dr. Harris a number of years and I have seen him handle many difficult problems, one the Life Extension Institute in New York. These questions can be solved, rightly and our way. I can visualize many clinics over our state. I warrant there will be obstacles to overcome because of organizations already effected, because of personal selfishness. I don't like the word "institution" used by Dr. Harris in his plan. I should like some other word that would more nearly reflect the composite view of the medical profession of that community. We have the service. None but the profession can render that service, therefore why shouldn't we control it? But we must remember that that control must always be ethical in every respect. We must meet our part of our obligation. I can see by the intensification of our organization the slow but sure accomplishment of what Dr. Harris has spoken. It doesn't seem necessary to establish an institution in every county in the state to put Dr. Harris' plan into action. Take advantage of what is already there. The profession should let these lay organizations know that it is ready to cooperate to its fullest ethical ability in rendering medical service to the public in keeping with its ability to pay.

(To be continued)

DEATHS

C. W. COREY, M.D., of Hartford City, died May 30th, aged sixty-four years. Doctor Corey graduated from the Fort Wayne College of Medicine in 1887.

OSSIAN H. COOK, M.D., of Fortville, died May 27th, aged sixty-seven years. Doctor Cook graduated from the University of Louisville, School of Medicine, in 1892.

DAVID F. LEE, M.D., of Indianapolis, died June 8th, aged sixty-nine years. Doctor Lee graduated from the Medical College of Indiana, Indianapolis, in 1883. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and the American Medical Association.

E. G. REYNARD, M.D., of Union City, died May 17th, aged sixty-nine years. Doctor Reynard graduated from the Medical College of Ohio, Cincinnati, in 1884. He was a member of the Randolph County Medical Society, the Indiana State Medical Association and the American Medical Association.

RICHARD B. DOUGLAS, M.D., of Terre Haute, died May 25th, aged fifty-three years. Doctor Douglas was a member of the Vigo County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Eclectic Medical College of Indiana, Indianapolis, in 1903.

C. W. DANCER, M.D., of Stroh, died May 20th, aged fifty-seven years. Doctor Dancer graduated from the Lincoln Memorial University, Medical Department, Sewanee, Tennessee, in 1899. He was a member of the LaGrange County Medical Society, the Indiana State Medical Association and the American Medical Association.

HANNAH M. GRAHAM, M.D., of Indianapolis, died May 24th, aged fifty-four years. Doctor Graham was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. She graduated from the Central College of P. and S., Indianapolis, in 1897.

NEWS NOTES AND PERSONALS

THE Indianapolis Medical Society held a picnic at the Sunlight Dairy Farm, Greenwood, June 15th.

DR. A. L. WILSON has announced the removal of his office from 322 to 811 Hume-Mansur Building, Indianapolis.

THE Elwood members of the Madison County Medical Society were hosts for the June meeting, which was held June 19th.

THE twelfth annual meeting of the American Bronchoscopic Society was held in San Francisco, California, July 6, at the Fairmont Hotel.

AT the commencement exercises of the Indiana University School of Medicine ninety-nine graduates received their M.D. degrees. Five of the graduates were women.

DR. JOHN L. IDDIGS, of Crown Point, recently was made a member of the Indiana State Board of Health for a period of four years. He replaces Dr. J. A. Turner, of South Bend.

DR. ALBERT E. BULSON, of Fort Wayne, presented a talk on "Insidious Blindness" before the Northeastern Indiana Academy of Medicine, at Potawatomi Inn, Angalo, June 27th.

THE surgeons of Chicago are planning an interesting program of clinics for the nineteenth annual Clinical Congress of the American College of Surgeons to be held in Chicago October 14th to 18th.

THE Medical Protective Company has announced the removal of its executive offices from 35 East Wacker Drive to 360 North Michigan Boulevard, Chicago, Illinois. All correspondence should be sent to the new address.

DR. CHARLES E. SMITH, of Howell, has been named to succeed Dr. Henry Stempa as resident physician for the Boehne Tuberculosis Hospital. Doctor Stempa resigned to accept a position at Cedarcrest Connecticut State Tuberculosis Sanitarium.

IT has been announced by Edgar F. Allen, president of the International Society for Crippled Children, that a world conference of workers for crippled children, to be attended by public officials, scientific men and social workers, will be held at Geneva, Switzerland, July 28th to August 2nd.

ACCORDING to the *Seymour Daily Tribune* for May 29, Seymour is to have a medical clinic. Dr. Charles E. Gillespie, Dr. Harold P. Graessle, Dr. Oscar G. Salb and Dr. Louis Osterman have purchased a property at Walnut and Second streets and will build an addition to the present structure.

DR. J. E. GUDGEL, of Cynthiana, was made president of the Posey County Medical Society, at the annual meeting of the Society held June

4 at New Harmony. Dr. Charles Arburn, of Wadesville, was elected vice-president and Dr. Claude L. Rawlings, of New Harmony, re-elected secretary-treasurer.

WE wish to call attention to the advertisement of Hoffmann-LaRoche, Inc., in this issue. The name of this company has been changed from the Hoffman-LaRoche Chemical Works, to Hoffmann-LaRoche, Inc., and the firm now is in its new plant at Nutley, New Jersey, to which address all correspondence should be sent.

THE second annual post graduate clinics presented under the auspices of the Department of Post Graduate Medicine of the University of Michigan, the Michigan State Medical Society and the Alumni Association of the Detroit College of Medicine and Surgery were held June 18 and 19, in the auditorium of the Detroit College of Medicine and Surgery.

DR. D. F. CAMERON was made president of the Fort Wayne Medical Society at the annual meeting, June 4. Dr. B. M. Edlavitch was made vice-president; Dr. L. P. Harshman, secretary, and Dr. H. E. Glock, treasurer. Dr. L. W. Elston was elected delegate to attend the Evansville session of the Indiana State Medical Association, with Dr. S. P. Hoffman alternate.

EXAMINATION of candidates for commission as assistant surgeon in the Regular Corps of the U. S. Public Health Service will be held at Washington, D. C.; Chicago, Illinois; New Orleans, La., and San Francisco, California, on September 9, 1929. Requests for information or permission to take this examination should be addressed to the Surgeon General, U. S. Public Health Service, Washington, D. C.

AT the twenty-fifth annual session of the Fourth District Medical Society held in Greensburg May 21, Dr. D. L. Matthew, of North Vernon, was made president; Dr. N. A. Kremer, of Madison, vice-president, and Dr. W. L. Grossman, North Vernon, secretary-treasurer. Dr. H. P. Graessle, of Seymour, was re-elected councilor. The 1930 session of the Society will be held at North Vernon.

THE Child Hygiene Division of the Indiana State Board of Health will conduct Winona Lake Child Health Week, July 15th to 20th, under the direction of Dr. Ada E. Schweitzer. Examinations of preschool children (birth to seven years) who have appointments will be made by Child Hygiene Division physicians each day from 9:00 to 11:00 a. m. Part of the program will consist of an open forum, discussion of intelligence tests

for parents and a symposium on "The Child's Needs."

PRESIDENT HOOVER has named two Indianapolis physicians, Dr. H. E. Barnard, and Dr. William F. King, as members of a Federal commission to conduct a public health and child welfare survey. Dr. Barnard will serve as director of the commission. The commission is composed of twelve members whose object it is to formulate a definite plan for a nation-wide program of public health, the preliminary step of which will be a survey of present conditions, needs and possibilities in this field. The commission will work under the supervision of Dr. Ray Lyman Wilbur, secretary of the interior.

EXERCISES dedicating the new building of the Lincoln School for Nurses in New York City to "its high purpose for the advancement and progress of scientific medicine among the colored race" took place on the 19th of June. Speakers for the occasion were Mayor James J. Walker and Dr. Lindsley R. Williams, director of the New York Academy of Medicine. Mrs. Arthur Curtiss James outlined the new policy of training negro women for executive positions in the public health and nursing fields, which will follow the opening of the new structure, the first school building of its kind being fully equipped with the latest scientific devices. The structure is ten stories in height.

ESSAYS for the Samuel D. Gross Prize (fifteen hundred dollars) of the Philadelphia Academy of Surgery will be received in competition until January 1, 1930. Conditions annexed by the testator are that the prize "shall be awarded every five years to the writer of the best original essay, not exceeding one hundred and fifty printed pages, octavo, in length, illustrative of some subject in surgical pathology or surgical practice founded upon original investigations, the candidates for the prize to be American citizens." Essays, which must be written by a single author in the English language, should be sent to the "Trustees of the Samuel D. Gross Prize of the Philadelphia Academy of Surgery, care of the College of Physicians, 19 South 22nd Street, Philadelphia, on or before January 1, 1930. Each essay must be typewritten, distinguished by a motto, and accompanied by a sealed envelope bearing the same motto, containing the name and address of the writer. No envelope will be opened except that which accompanies the successful essay.

EIGHT men distinguished in science and letters and in other fields recently received the honorary degree of doctor of laws, the highest gift of Indiana University. Among those so honored was

Evans Woollen, Indianapolis financier and candidate for the Democratic nomination for president last year; Dr. Lafayette Page, Indianapolis surgeon; Dr. John F. Barnhill, Indianapolis surgeon, and Frank Clayton Ball, Muncie philanthropist. Dr. William N. Wishard, of Indianapolis, was given an honorary degree of bachelor of science by DePauw University, on the occasion of DePauw's ninetieth annual commencement.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Ciba Co., Inc.:

Isarol-Ciba.

Deshell Laboratories:

Petrolagar with Milk of Magnesia.

G. D. Searle & Co.:

Sulpharsphenamine-Searle, 0.1 Gm. Ampules.

Sulpharsphenamine-Searle, 0.2 Gm. Ampules.

Sulpharsphenamine-Searle, 0.3 Gm. Ampules.

Swan-Myers Co.:

Canada Blue Grass Concentrated Extract-Swan-Myers.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

May 24, 1929.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held May 17 read, corrected, and approved.

The release, "The Barefoot Boy", was reviewed for publication Saturday, June 1. The secretary was instructed to send copies of this release to an orthopedist and have him make his suggestions and corrections.

Radio release, "Prevent Hay Fever Now", read and approved for broadcast Saturday, June 1.

The following letter was received from the executive secretary of the Indiana Parent-Teacher Association:

"The June bulletin of the Indiana P.-T.A. will be the last one until October 1, 1929. Therefore, we will not need any releases during the summer months."

A letter was to be written to the executive secretary of the Parent-Teacher Association thanking her for her help and cooperation in this work and assuring her that releases would be sent to her as usual starting October 1.

The following request was received for speaker:

June 4—County Medical Society, Danville, Illinois. 6:30 p. m. central standard time. Request for speaker on general medical or surgical subject.

The Better Business Bureau report on the Indianapolis Cancer Hospital, 538 West New York Street, Charles C. Root, M.D., medical director, reviewed by the Bureau. The Bureau of Publicity compliments the Better Business Bureau on its splendid work in bringing the case before the State Board of Medical Registration and Examination with the result that Dr. Root's license to practice medicine was revoked. The Bureau authorized the distribution of these reports to the county secretaries

and officers of the Indiana State Medical Association and also to the editors of the journals of the Indiana State Medical Association and the Indianapolis Medical Society.

Letter received from the Colorado State Medical Society secretary. That part which pertains to state organization follows:

"The Colorado State Medical Society has employed Mr. Harvey T. Sethman of Denver as its new Executive Secretary and he will take his office over on the 1st of June.

"We plan on sending him away immediately to visit one or more state societies which have executive secretaries in order that he may become familiar with the duties of his office and also bring home to us any ideas which such societies may have that are not at present being put into effect in Colorado.

"I am wondering whether we may impose upon you to receive Mr. Sethman soon after the first of June and let him look around at your place for several days. I may be mistaken but I believe that you once offered to lend us your assistance in this way.

"I should also appreciate suggestions from you as to some other state society which Mr. Sethman might visit while on his tour. We are planning to have him go also to Chicago and spend a few days at the American Medical Association headquarters." The following bills were approved for payment:

Addressograph Company	\$1.00
M. N. Hadley, M.D.	2.90

\$3.90

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole May 31, 1929.

BUREAU OF PUBLICITY

June 7, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held May 24 read and approved.

The release, "Safe and Sensible Swimming," was reviewed for publication Saturday, June 15. One member of the Bureau was assigned to give additional information upon this release and to make additional suggestions and corrections.

Radio release, "The Barefoot Boy", was approved for broadcast Saturday, June 8.

The following report of a medical meeting was received:

June 4—County Medical Society, Danville, Illinois. "Health Fads and Foolishness."

Highly favorable verbal report received from Danville physicians upon speaker of June 4 who was supplied by the Bureau of Publicity. This verbal report came from the Danville physicians who attended the annual catfish dinner meeting of the Fountain-Warren County Medical Society. These physicians said that Indiana physicians had supplied some of the best programs that they had had at their county society meetings.

C. W. Stewart, 1911 East 38th Street, Indianapolis, prospective agent for *Hygeia*, appeared before the Bureau and outlined his plan for placing *Hygeia* in the rural communities of the state. The Bureau was favorably impressed with Mr. Stewart and upon receiving word from the American Medical Association giving him authorization to solicit subscriptions for *Hygeia* in this state, the Bureau members said they would give Mr. Stewart all the assistance possible.

Report received over the telephone from T. M. Overley, general manager of the Indianapolis Better Business

Bureau, that apparently Dr. C. C. Root, owner and operator of the Indianapolis Cancer Hospital, had left town following the revocation of his license and that his hospital had been closed and dismantled. This is a victory for the Better Business Bureau which expected Dr. Root to appeal his case to the courts. It is understood that several of Dr. Root's creditors have attempted to locate him through the Better Business Bureau. The Bureau of Publicity went on record expressing its approval of the fine work that was done by the Better Business Bureau in this case.

Letter received from the new executive secretary of the Colorado State Medical Society stating that he was planning to visit Indianapolis in order to get an idea of the work of the executive office and the Bureau of Publicity of the Indiana State Medical Association, in view of doing similar work in Colorado. An invitation was extended to him to attend a meeting of the Bureau of Publicity.

A letter was received from the executive secretary of The Academy of Medicine of Toledo and Lucas County May 25 asking for information concerning the work of the Bureau of Publicity. The letter requested "information on the reasons for its organization and a description of its present activities." This request was answered embodying an outline of the work of the Bureau, and the reply of the executive secretary of the Toledo Academy of Medicine follows:

"I sincerely appreciate your wonderful letter of June 1st, and the various reports and pamphlets explaining the work of your Bureau of Publicity. Thank you so much for the detailed report. One of our trustees desired all this information. "If we can ever be of any service to you, please call upon us. We wish to reciprocate for your kindness."

The following bills were approved for payment:
 Central Press Clipping Service..... \$6.54
 A. B. Dick Company..... 2.50
 \$9.04

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 14, 1929.

BUREAU OF PUBLICITY

June 14, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held June 7 read, corrected and approved.

The release—"Sunlight, Suntan, and Sunburn"—read and approved for release June 22.

Radio release—"Safe and Sensible Swimming"—was approved for broadcast Saturday, June 15.

The following report of a medical meeting was received:

June 4—County Medical Society, Danville, Illinois, "Health Fads and Foolishness."

The Bureau of Publicity made the following comment upon the work of the Better Business Bureau:

High praise should be given the Indianapolis Better Business Bureau for its efficient work in ridding the city of the Indianapolis Cancer Hospital, an institution that has been "a disgrace to the community" for approximately twelve years. Many complaints have come to the Publicity Bureau of the Indiana State Medical Association concerning the activities of this institution and through the cooperation of Robert H. Bryson, postmaster of Indianapolis, many persons who have inquired concerning this hospital have been told of its methods and hence have saved their money. However, had not the Better Business Bureau interested itself in bringing

charges against Charles C. Root, the medical director of this institution, before the State Board of Medical Registration and Examination, the Indianapolis Cancer Hospital would be doing business this very minute in the same old way at the same old stand, 538 West New York Street.

The profession knows, too, that if any medical organization had brought the charges, the cry "persecution" would have been raised, but with a detached and disinterested party such as the Better Business Bureau, the entire matter received whole-hearted public approval. The Better Business Bureau spent more than \$1,000 in the prosecution of the case.

During the hearing Alvah Rucker, the attorney for Dr. Root criticized the Better Business Bureau for handling this case, saying that it was not in the province of the Better Business Bureau to interest itself in medical or professional matters but it should confine its activities strictly to business matters. How could the citizens of Indianapolis be better served than by an intensive campaign on the part of the Better Business Bureau to drive quacks from Indianapolis? It goes without saying that pretenders such as the Root institution take thousands of dollars from the pockets of our citizens each year.

When the state board revoked Dr. Root's license he said he would appeal his case and battle the Better Business Bureau to the end. Despite this statement, shortly after the medical board had revoked his license, the Better Business Bureau is reported to have received a call from one of Dr. Root's creditors as to his whereabouts. Upon investigation by T. M. Overley, manager of the Better Business Bureau, who carried on the battle before the medical board against Dr. Root, it was found that the Indianapolis Cancer Hospital was closed and Dr. Root had moved out, bag and baggage.

The work of the Better Business Bureaus throughout the United States has been approved by the medical profession. The Council and the Executive Committee of the Indiana State Medical Association have gone on record recommending that the medical societies in the various cities of the state join their own local Better Business Bureaus.

Hence, the Publicity Committee of the Indiana State Medical Association extends to Mr. Overley its approval and expresses its appreciation of the fine work done by the Indianapolis Better Business Bureau and urges its support by the Indianapolis Medical Society and the individual physicians of the city. It also wishes to repeat the recommendations of the Executive Committee and the Council that the physicians in other cities of the state join their respective Better Business Bureaus.

Copies of this comment were to be sent to the secretary of the Indianapolis Medical Society, to the manager of the Indianapolis Better Business Bureau, to the editor of THE JOURNAL of the Indiana State Medical Association, and to the editor of the Indianapolis Medical Journal.

The Bureau received letters from the Committee on the Cost of Medical Care, thanking the Indiana State Medical Association for "the interest in the work of the Committee on the Cost of Medical Care and especially for your cooperation in connection with the rural survey which has just been started in Shelby county."

The new executive secretary of the Colorado State Medical Society spent two days in Indianapolis going over in detail the work as being carried on by the various committees of the State Association at the headquarters office of the Indiana State Medical Association.

Letter received from the circulation manager of *Hygeia* in regard to placing an agent in the field in Indiana to promote this magazine in the rural districts of the state. The Bureau interviewed the man in question and instructed the secretary to send a report of the interview to the circulation manager of *Hygeia*.

The June bulletin of the Toledo Academy of Medicine

containing an article entitled, "Three Radio Talks", was reviewed and commented on favorably by the Bureau.

A letter received from the Indianapolis Council of Social Agencies asking the secretary of the Indiana State Medical Association to serve on the Advisory Committee of the Council was presented to the Bureau. According to the letter, "the Council has accepted responsibility for a comprehensive recreation survey of the city which is to be financed by the Indianapolis Foundation. The Playground and Recreation Association of America has, upon invitation, assigned one of its workers, Mr. Eugene T. Lies, to direct this study. Mr. Lies is on the ground and has begun his work."

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole June 21, 1929.

FOUNTAIN-WARREN COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Fountain-Warren County Medical Society was held at Covington, Indiana, June 6, 1929.

A large number of physicians were present from this section of the state and from Danville, Illinois. A fine fish dinner was served and seventy physicians enjoyed a good social time.

The meeting was called to order at 8 p. m. and Dr. William F. King, secretary of the Indiana State Board of Health, gave an address on "Undulant Fever." He gave a history of the disease in Malta and its introduction into the United States and its spread over this country, and particularly its prevalence in Indiana. Undulant fever is spread by the use of milk from infected animals, and the only known plan to purify the milk to rid it of this infection as well as typhoid and other diseases is to pasteurize all milk. Infected cattle and goats should be segregated as soon as possible when it is known that they are infected. All tests for typhoid that come to the State Board Laboratories also are tested for undulant fever, and by this means many cases are diagnosed in Indiana.

Doctor King's address was open to the public and a good audience listened attentively.

Professor Doyle of Purdue University, in discussing the paper, gave some good insight into the laboratory work of undulant fever.

A. L. SPINNING, M.D.,
Secretary.

MADISON COUNTY MEDICAL SOCIETY

June 19, 1929.

The June meeting of the Madison County Medical Society was held in Elwood and the members of the Elwood Medical Society were hosts to the physicians and their wives at a picnic at Dr. Merle Hoppenwrath's country home a mile south of the city and opposite the Elwood Country Club. The program was an extensive one and began with a golf tournament in the afternoon, participated in by about twenty members, and the golf widows were entertained at bridge in the club house. Mrs. M. A. Austin won the high score with Mrs. M. L. Ploughe. Dr. Newcomer lost the most pounds in the golf game and Dr. Wilder lost the most balls.

At 6:30 o'clock there were over a hundred persons collected around the picnic tables in Dr. Hoppenwrath's grove, feasting on fried chicken and all the other things that good cooks can provide. The entire program was a surprise affair arranged by Drs. Owens, Hoppenwrath and Ploughe. Beginning at 8 p. m. it lasted until 2 a. m. Three Indianapolis specialists added to the interest of the program, giving short talks on important phases of their work. The only accident that spoiled the occasion was when Dr. Alfred Henry stood up in a boat to land a two-pound bass from the lake, rocked the boat, and fell into eight feet of water, so the party was distinctly a wet one for him. He was undecided whether to follow his own ad-

vice and take a sun bath *au naturel* while his clothes dried out, or to wear overalls, but he chose the latter.

The festivities opened with a series of case reports by Dr. F. C. Guthrie, who brought up the question as to the possibility of an Immaculate Conception occurring in Indiana. Dr. H. O. Mertz gave an interesting travelogue entitled "Urinating Around", explaining the causes of some cases of Eneuresis in children. Dr. Henry behaved admirably in the absence of suitable clothing, and after telling a number of catchy stories, recited that pathetic piece entitled, "T. B. or not T. B." Dr. J. W. Carmack, also of Indianapolis, responded to the toast, "My Tonsils, 'Tis of Thee", and ended up with an ode from Horace, very witty and very appropriate:

"What cannot wine perform? It brings to light
The secret soul; it bids the coward fight;
Gives being to our hopes, and from our hearts
Drives the dull sorrow, and inspires new arts.
Is there a myth whom bumpers have not taught
A flow of words, a loftiness of thought?
Even in the grasp of poverty
It can enlarge, and bid my soul be free."

Dr. G. V. Newcomer presided as toastmaster and introduced so much home talent from Elwood that one wonders how Keith has missed so many good bets. Mark Winans, local raconteur and poet, admitted that he had made enough out of his friendship with the local profession while he was in the undertaking business for twenty years, to retire and have a good time. O. W. Coxen, poultry raiser and poet, gave some original readings, one of which "The Love Affairs of a Traveling Man", was particularly entertaining. Besides these, Dr. Floyd Harrold gave a violin solo, Miss Finnigan pathetically rendered a number of Blues songs. The Hawkins quartette gave a number of songs, banjo, guitar, clarinet, and saxophone solos. While interspersed between the Eddie Land orchestra jazzed things up to such an extent that about eleven o'clock some fifty of the younger set of Elwood descended upon the place, and, clearing out the garage, danced the light fantastic until 2 a. m.

The only thing that marred the occasion in any manner was the fact that the many recent rains had flooded the cellar. Probably a hundred and fifty persons were in attendance, and this is the second year that the Elwood Society has been hosts to the Madison County Medical Society and their friends. So much of a success have been the two parties that if they are continued each year they will become as noted as the more extensively advertised Medical Frolics given by the Indianapolis Medical Society. The one other person who might have added to the festivities of the occasion was Dr. Doeppers, of Indianapolis, who will be on the program next year.

Respectfully,

M. A. AUSTIN, M.D., Sec'y.

TIPPECANOE COUNTY MEDICAL SOCIETY

Lafayette, Indiana, June 13, 1929.

The Tippecanoe County Medical Society met in regular session for a dinner at the Lafayette Country Club. We were favored by guests of honor consisting of urologists from Chicago and various cities of Indiana who were present during the day as guests of Drs. Crockett and Washburn.

The minutes of the May meeting were read and approved.

The applications of Drs. Radcliff, Cunningham and Stahl were presented for the second time. Upon motion these three were elected to membership in the Tippecanoe County Medical Society.

The application of Dr. J. W. Ballard of the State Soldiers Home, Lafayette, Indiana, was presented. A communication from the secretary of the Marion County Medical Society of West Virginia was read and a transfer card accompanied the application showing Dr. Ballard to have been a member of the said county and state

societies for eight years. Dr. Ballard was duly elected to membership in our Society.

Dr. B. C. Corbus, of Chicago, presented an interesting paper on "Pyuria", an abstract of which is as follows:

"Pyuria is one of the oldest phases of urology. No urine specimen from the female is of any value unless catheterized. There is no danger of infecting a bladder that is draining.

"Pyuria caused by infections from without results from chemical or mechanical urethritis, acute or chronic gonorrheal urethritis, stricture, cowperitis, vesiculitis, prostatitis, cystitis. Infections from within results from tuberculosis of the lung, focal infections of the sinuses, teeth, tonsils or ear, draining through the kidney, stone, pyelonephritis, ureteral obstruction, hydronephrosis or cystitis. There is no primary cystitis; cystitis results from infection from without in or within out. Non-specific urethritis may result from spiritous liquors, prostatitis, stone, diverticulitis, ureteral stricture or obstruction.

"From a focus of infection, bacteria are carried by way of the blood stream through the kidney and ureter, causing an erosion of the ureter; the tissue contracts and forms a stenosis with back pressure and stagnation and infection of the urine. This may result years after the focus has been removed. Ninety-nine percent of infections come down the urinary tract. The colon bacillus is not a primary invader but is secondary to staphylococcus or streptococcus. Ureteral kinks are produced of ureteral stricture which causes an enlargement laterally and longitudinally. Pyelitis of pregnancy is only an incidence in ureteral obstruction; pregnancy simply emphasizes this. There is no pyelitis per se, it is due to poor drainage.

"Ureteral stricture is very common. Two-thirds of the pain on the left and one-third on the right side are due to ureteral obstruction.

"If there is good urinary drainage above the bladder there will be no cystitis.

"If a person has bad teeth, etc., and then develops a urinary infection, remove the focus.

Motion was made and carried that a vote of appreciation be extended the visiting urologists.

Motion was made and carried that a rising vote of thanks be extended Dr. B. C. Corbus, of Chicago, for his excellent and interesting presentation of the subject "Pyuria".

Motion to adjourn was carried.

J. C. BURKLE, M.D., Sec'y.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Further information concerning these books will be supplied on request.

Books received since May 1, 1929:

THE COLLECTED PAPERS OF THE MAYO CLINIC AND MAYO FOUNDATION FOR 1928. Volume XX. Edited by Mrs. M. H. Mellish, Richard M. Hewitt, M.D., and Mildred A. Felker, B.S. Octavo volume of 1197 pages with 288 illustrations. Cloth. Price \$13.00. W. B. Saunders Company, Philadelphia and London, 1929.

NEW AND NONOFFICIAL REMEDIES, 1929, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1929. Cloth. Price, postpaid, \$1.50. 488 pages. American Medical Association, Chicago, 1929.

ANNUAL REPRINTS OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1928. Cloth. Price, postpaid, \$1.00. 75 pages. American Medical Association, Chicago, 1929.

THE NEUROSES. By Israel S. Wechsler, M.D., Associate Professor of Clinical Neurology, Columbia Uni-

versity, New York City. 330 pages. Cloth. Price \$4.00. W. B. Saunders Company, Philadelphia and London, 1929.

GONORRHEA AND KINDRED AFFECTIONS. By George Robertson Livermore, M.D., F.A.C.S., Professor of Urology, Medical Department, University of Tennessee, Memphis, Tennessee; Consulting Urologist, Memphis General and Baptist Memorial Hospitals and Hospital for Crippled Adults; and Edward Armin Schumann, M.D., F.A.C.S., Associate Professor of Obstetrics, University of Pennsylvania, Gynecologist and Obstetrician to Philadelphia General Hospital. 257 pages, illustrated. Cloth. Price \$5.00. D. Appleton and Company, New York and London, 1929.

THE NOSE, THROAT AND EAR AND THEIR DISEASES. In original contributions by American and European authors. Edited by Chevalier Jackson, M.D., Professor of Bronchoscopy and Esophagoscopy in the University of Pennsylvania, in the Jefferson Medical College, and in the Graduate School, University of Pennsylvania, and George M. Coates M.D., Professor of Otology, Graduate School, University of Pennsylvania. 1177 pages with 657 illustrations and 27 inserts in colors. Cloth. Price \$13.00. W. B. Saunders Company, Philadelphia and London, 1929.

CLINICAL LABORATORY METHODS. By Russell L. Haden, M.D., Professor of Experimental Medicine University of Kansas, School of Medicine, Kansas City. Third edition. 317 pages, 69 illustrations and 4 color plates. Cloth. Price \$5.00. C. V. Mosby Company, St. Louis, 1929.

OSTEOMYELITIS AND COMPOUND FRACTURES. By H. Winnett Orr, M.D., F.A.C.S., Chief Surgeon of the Nebraska Orthopedic Hospital, Orthopedic Surgeon Lincoln General Hospital, etc. 208 pages, illustrated. Cloth. Price \$5.00. C. V. Mosby Company, St. Louis, 1929.

PRINCIPLES AND PRACTICE OF ELECTROCARDIOGRAPHY. By Carl J. Wiggers, M.D., Professor of Physiology in the School of Medicine of Western Reserve University, Cleveland, Ohio. 226 pages with 61 illustrations. Cloth. Price \$7.50. C. V. Mosby Company, St. Louis, 1929.

THE CONQUEST OF CANCER BY RADIUM AND OTHER METHODS. By Daniel Thomas Quigley, M. D., F.A.C.S., Instructor in Surgery in the University of Nebraska College of Medicine; Fellow of the American Medical Association. 539 pages, with 334 engravings. Cloth. Price \$6.00. F. A. Davis Company, Philadelphia, 1929.

BOOK REVIEWS:

THE TONSILS AND ADENOIDS AND THEIR DISEASES. Including the Part They Play in Systemic Diseases. By Irwin Moore, M.B., C.M., (Edin.) late honorary surgeon to the London Throat Hospital, etc. 395 pages. Cloth. Price \$6.50. The C. V. Mosby Company, St. Louis, 1928.

This book by an English author is an excellent presentation of the subject and particularly because the conclusions are based not alone upon the author's wide study and experience, but upon a study of an extensive literature all of which is mentioned in the bibliography at the conclusion of each chapter. Of especial importance is the thorough and careful manner with which the author considers the subject of tonsils and adenoid tissue with relation to the part they play in the causation of systemic diseases. One thing that is especially commendable is the recommendation that the tonsil and adenoid operation should be approached with some degree of reverence in view of the possibilities of grave complications. Accordingly he recommends careful and painstaking pre-operative as well as post-operative care in connection with a very careful and painstaking operative technic. The author gives due credit to various methods of operating which are described in detail but shows his preference for the dissection method for the removal of tonsils, and we are quite willing to agree with him that a clean dissection is far less apt to be followed by secondary complications than any of the mod-

ern operations of cutting and crushing or crushing alone. Furthermore, a careful technic is less apt to be followed by secondary hemorrhages which are dreaded as a complication of tonsillectomy. Every possible phase of the subject seems to have been discussed and always in a comprehensive way so that the book is a welcome addition to our knowledge of the function of the tonsils and adenoid tissue, the pathologic conditions arising therefrom and approved methods of treatment.

DISEASES OF THE NOSE, THROAT AND EAR. By E. B. Gleason, M.D., LL.D., Professor of Otology, Graduate School of the University of Pennsylvania. Sixth edition, thoroughly revised. 617 pages, with 262 illustrations. Cloth. Price \$4.50. W. B. Saunders Company, Philadelphia and London, 1929.

This is the sixth edition of a well-known manual by a well-known author and teacher. The author has stated in the preface of his book that it is exceedingly difficult to write a manual, because of the differences of opinion that exist among successful otolaryngologists as to the best method of treatment in even the more common pathological conditions. Some lay more stress on one etiologic factor than another, and there is a great variance in even the technic of operations, as well as in the selection of the particular operation which is indicated in the individual case. Some do conservative operations where others do radical operations. Some have faith in vaccine therapy and others have no faith in it at all. In revising the sixth edition the author has intended to give attention to the criticisms of successful teachers of otolaryngology and in consequence he has given the students and general practitioners of medicine a manual that is a safe guide and one that more nearly represents the accepted teaching of the majority of otolaryngologists than any preceding editions of the work. The illustrations are good and the formulas in the back of the book are valuable quick references.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

TABLETS THEOCIN, SOLUBLE 2½ GRAINS.—Each tablet contains 2½ grains of theocin soluble, formerly called theocin sodium acetate (New and Nonofficial Remedies, 1928, p. 424). Winthrop Chemical Co., Inc., New York.

PERFRINGENS ANTITOXIN.—**B. WELCHII ANTITOXIN.**—**ANTI-GAS GANGRENE SERUM.**—An anaerobic antitoxin (New and Nonofficial Remedies, 1928, p. 351) prepared by immunizing horses with gradually increasing doses of the toxin of *B. welchii*. The finished product is tested on pigeons by determining the minimum amount necessary to neutralize the M. L. D. of *B. welchii* toxin, the potency being expressed in units. The product is marketed in 100 cc. bottles of unconcentrated serum containing at least one unit per cc.; in 50 cc bottles of unconcentrated serum containing at least two units per cc.; and in 20 cc. syringes of concentrated serum containing at least five units per cc. H. K. Mulford Co., Philadelphia.

TETANUS-PERFRINGENS ANTITOXIN REFINED AND CONCENTRATED-P.D. & Co.—An anaerobic antitoxin (New and Nonofficial Remedies, 1928, p. 351) prepared from the toxins of *B. welchii* and *B. tetani* by immunizing horses with repeated, gradually increasing doses of tetanus toxin and perfringens (*B. welchii*) toxins until samples from treated animals show one unit or more of tetanus antitoxin per cc. and one unit or more of perfringens antitoxin per cc. In addition to use in the treatment of gas gangrene, this product is proposed for use as a prophylactic in conditions such as wound or contusions in the abdominal tract and as curative in cases of acute peritonitis and obstruction of the small bowel. It is marketed in packages of one syringe containing 1500 units of tetanus antitoxin and 10 units of

perfringens antitoxin. Parke, Davis & Co., Detroit. (*Journal of the A. M. A.* May 4, 1929, p. 1521).

PROPAGANDA FOR REFORM

ERGOTOLE, EXTRACT OF ERGOT PURIFIED, ERGOTIN-MERCK, LIQUOR ERGOT-MULFORD, AND SECACORNIN OMITTED FROM N.N.R.—All of the ergot preparations included in New and Nonofficial Remedies, 1928, are watery extracts and as such, according to the current view, cannot contain much of the active alkaloids which are the important constituents of ergot when viewed from a clinical standpoint. With one exception, none is assayed by the U.S.P. method or any other method that will show the content of active alkaloids. The methods by which they are assayed show only, or mainly, the content of putrefactive amines, which have not proved desirable in obstetric work. The referee of the Council on Pharmacy and Chemistry for ergot preparations reported assays of the accepted brands not claiming assay by the official method (except Liquor Ergot-Mulford) which showed the preparations to contain less than 10 percent of their claimed strength. In other words, they were found practically devoid of specific alkaloids. The Council voted to omit Ergotole, Extract of Ergot Purified, Ergotin-Merck, Liquor Ergot-Mulford, and Secacornin from New and Nonofficial Remedies. (*Journal of the A. M. A.*, May 4, 1929, p. 1521).

OVOFERRIN OMITTED FROM N.N.R.—Ovoferrin is a solution containing 5 percent of an artificial protein product in which iron is present in the so-called organic, or masked, form. This product was accepted for New and Nonofficial Remedies in 1905. From the time of its acceptance, members of the Council have questioned its value, mainly on the ground that it presents no demonstrated superiority to the standard U.S.P. iron preparations. Ovoferrin is a survival of the now obsolete theory that iron in non-ionized form should be more efficient therapeutically than the ordinary iron preparations. The Council on Pharmacy and Chemistry voted to omit Ovoferrin from New and Nonofficial Remedies because it is an unscientific and superfluous mixture. (*Journal of the A. M. A.*, May 4, 1929, p. 1521).

VIKING PALATABLE COD LIVER OIL OMITTED FROM N.N.R.—Viking Palatable Cod Liver Oil, marketed by the Viking Health Products Co., is cod liver oil containing 0.2 percent of benzaldehyde. It was accepted for inclusion in New and Nonofficial Remedies in 1927. In 1928 an advertisement for the product appeared in the *Chicago Daily News* which was objectionable in that it made unwarranted claims for the product. The rules of the Council on Pharmacy and Chemistry provide that the acceptance of an article that is advertised to the public with unwarranted claims shall be summarily rescinded. The Council voted to omit Viking Palatable Cod Liver Oil from New and Nonofficial Remedies because it is advertised to the public with claims that are objectionable and unwarranted. (*Journal of the A. M. A.*, May 4, 1929, p. 1521).

THE MARMOLA QUACKERY.—Edward D. Hayes has been quacking it for a quarter of a century. Using the trade name "Marmola Company" he exploited a thyroid-containing mixture—Marmola. In 1926 the postal authorities were about to issue a fraud order against the Marmola Company when Hayes submitted an affidavit declaring that he would discontinue the Marmola business. He did so by changing the name of the Marmola Company to the Raladam Company! He continued to sell his nostrum through the drug stores instead of through the mails. Now the Federal Trade Commission has issued an "Order to Cease and Desist", the essential features of which are that the firm cease and desist from representing that Marmola is a scientific and accurate method for treating obesity; representing that the formula from which Marmola is made is a scientific formula; and representing that Marmola can be taken without the advice and direction of a competent medical authority as a safe and harmless remedy in the treatment of obesity. (*Journal of the A. M. A.*, May 4, 1929, p. 1541).

THE LUCULENT FRAUD.—The C. H. Johnson Medicine Company, which did business from Chicago, Fort Wayne, Ind. and Lima, Ohio, sold a fraudulent consumption cure called "Luculent". The firm was owned by one Orville G. Johnson, a negro. Johnson made his nostrum at home in pans in his kitchen. The product was said to have been made from various herbs. The postoffice department issued a fraud order against this cruel fake, closing the mails to the C. H. Johnson Medicine Company. (*Journal of the A. M. A.*, May 11, 1929, p. 1620).

THE RENTAL OF RADIUM.—The Council on Physical Therapy publishes a report on the rental of radium which was approved by the Council on Pharmacy and Chemistry. The Council points out that during the last few years some of the firms supplying radium, as well as a few individual radiologists, have undertaken to prepare and to furnish radium to physicians on a rental basis. Rental has not been limited to radiologists, who might be expected to know how to make proper use of the radium, but the intent of this service is to enable any physician to treat his own patients. The Council feels that the rental of radium to physicians cannot be entirely condemned; but, since the physician renting the radium must assume full legal and moral responsibility for the diagnosis and treatment of his patients, the Council does condemn the system of "mail-order" and telephone diagnosis and the type of treatment with which such rental has come to be associated. (*Journal of the A. M. A.*, May 18, 1929, p. 1678).

AMNIOTIN-SQUIBB (OVARIAN HORMONE-SQUIBB).—The Council on Pharmacy and Chemistry publishes a preliminary report on Amniotin-Squibb and postponed acceptance to await acceptable evidence for the value of the product in ovarian hypofunction in women. The report refers to the preparation of extracts from the ovaries which on injection into spayed rats bring on changes in the vagina characteristic of estrus; that a few investigators have reported that they produce a similar effect in monkeys; and that extracts having similar actions on spayed rats have been prepared from other tissues such as the placenta, the amniotic fluid and even from the urine of pregnant animals, as well as non-pregnant females and normal males. The influence of these extracts on the symptoms of ovarian hypofunction in women has been neither striking nor consistent, but the stage has at least been reached where an extract having the definite effect on the spayed rat and the spayed monkey is sufficiently purified for experimental application. It is reported that the ovarian hormone-Squibb, prepared from the ovary, has been withdrawn from the market, and Squibb & Sons now present Amniotin, prepared from the fetal fluid of cattle. The preparation is to be administered subcutaneously. Amniotin is sufficiently purified and standardized to be used for careful experimental therapy in clear cases of ovarian hypofunction in women. (*Journal of the A. M. A.*, May 18, 1929, p. 1678).

ATOMIDINE NOT ACCEPTABLE FOR N.N.R.—The Council on Pharmacy and Chemistry reports that in the *Journal of the American Dental Association* for January, 1929, there appeared a report and an analysis of "Atomidine". In consideration of the evidence presented in this report—most of which the Council reprints by permission—the Council declares Atomidine (Schieffelin & Co.) unacceptable for New and Non-official Remedies because it is an unscientific mixture of semisecret composition marketed under a nondescriptive name, with therapeutic claims that are unwarranted and grossly exaggerated, and in a way to lead the public to place false dependence on it. It is claimed that "Atomidine is a preparation standardized to liberate 1 percent of iodine in an Atomic or Nascent form when in contact with tissue". Beyond this and similar generally uninforming statements, no indication as to the qualitative or quantitative chemical composition of Atomidine appears in the advertising material. From the detailed report of

the chemist of the American Dental Association the *Journal of the American Dental Association* concludes that Atomidine is an unnecessarily complex medium for iodine medication. (*Journal of the A. M. A.*, May 18, 1929, p. 1679).

ACCIDENTS WITH LOCAL ANESTHETICS.—The investigation of accidents following the use of local anesthetics instituted by the Therapeutic Research Committee of the Council on Pharmacy and Chemistry of the American Medical Association has had many practical results. The reports were published in 1920 and 1924; now, André Klotz of the Strasbourg Hospital has published the results of an extensive study of the literature on this subject. He agrees with the American committees that accidents are due mainly to overdosage, to injections of cocaine, to the use of solutions of too high concentration, to excessive doses of epinephrine, and a smaller number to peculiar conditions of the patient that are beyond evaluation by the physician. The investigations of the American committees and of Klotz have thrown much light on the causes of avoidable accidents with local anesthetics, but it is obvious that many surgeons continue to disregard the warnings that have been published. The report of Klotz emphasizes the importance that physicians should continue to cooperate with the Permanent Committee for the Study of Toxic Effects of Local Anesthetics of the Therapeutic Research Committee. (*Journal of the A. M. A.*, May 18, 1929, p. 1680).

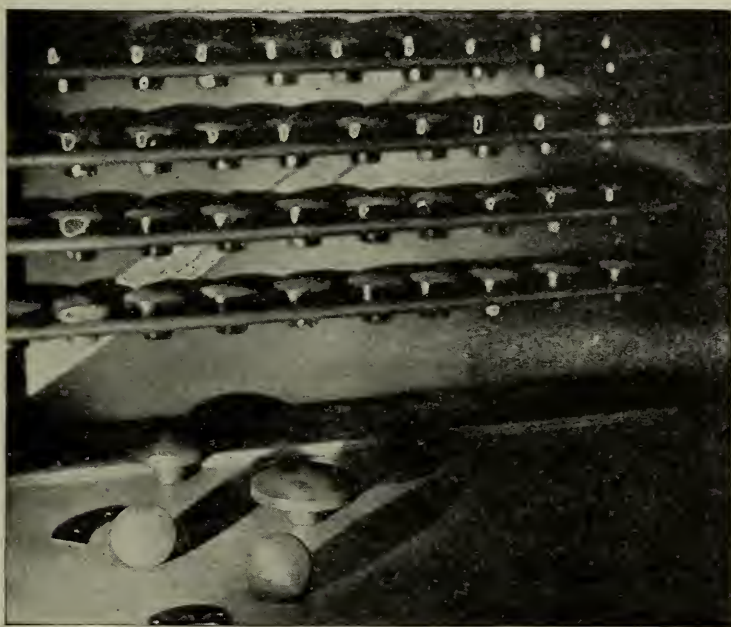
PRESCRIPTION OF REMEDIES IN ACCORDANCE WITH ETHICS.—The Principles of Medical Ethics of the American Medical Association contains the following with regard to the prescribing of medicines: "... it is ... unethical to prescribe or dispense secret medicines or other secret remedial agents, or manufacture or promote their use in any way". It contains no provision holding it unethical to prescribe proprietary medicinal preparations of declared known composition. If physicians will limit their prescribing to the medicinal products included in the United States Pharmacopeia, the National Formulary, and New and Nonofficial Remedies, they may be confident that they are not prescribing secret remedies; they should be mindful, however, that the National Formulary contains many drugs and drug mixtures that are practically worthless, and that preparations in New and Nonofficial Remedies are new, and, though worthy of trial, are in some instances still more or less in the experimental stage. For a guide to prescribing, the Epitome of the U. S. Pharmacopeia and National Formulary, and New and Nonofficial Remedies are to be recommended. (*Journal of the A. M. A.*, May 18, 1929, p. 1697).

THE CLARK'S O.N.T. FRAUD.—Nathan C. Collins and William Gilchrist, according to the evidence presented by the Solicitor of the Post Office Department, exploited an alleged cure for impotence under such trade names as the "Clark Remedy Co.", "Clark's O.N.T." and "Nate Clark". In addition, Collins also used the trade names "Madge Laboratory" and "C. C. Nathan" in exploiting a similar product, "Old Madge's Vita", for the same purposes as "Clark's O.N.T.". As a result of investigation, the solicitor for the Post Office Department recommended to the Postmaster General the issuance of a fraud order, and on May 7, 1929, the mails were closed to the Clark Remedy Company, Clarks' O.N.T., Nate Clark, Madge Laboratory, Old Madge's Vita, and C. C. Nathan. (*Journal of the A. M. A.*, May 25, 1929, p. 1782).

AOLAN.—Aolan is prepared from milk freed from fat, and is claimed to be a germ free and toxin free solution of lactalbumin. It consequently contains protein foreign to the human body and its injection on that account may be fraught with the danger of violent reactions, especially in so-called hypersensitive persons. The Council on Pharmacy and Chemistry has declared Aolan inadmissible to New and Nonofficial Remedies because

(Continued on Adv. p. xx.)


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AMERICAN OPTICAL COMPANY

TRUTH ABOUT MEDICINES

(Continued from page 306)

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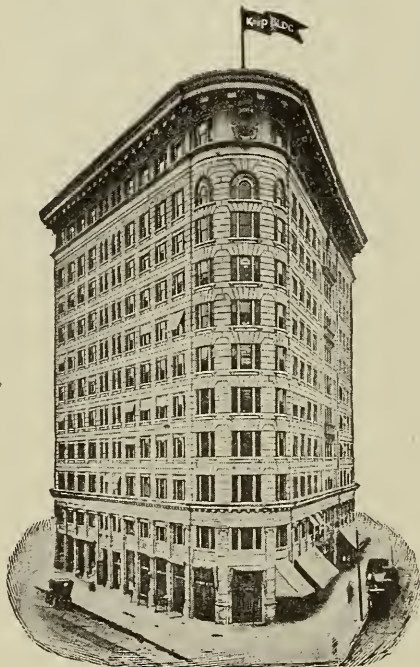
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DOMESTIC LIVER EXTRACT FOR USE IN PERNICIOUS ANEMIA

The sufferer from pernicious anemia, like the diabetic patient, must frankly face the necessity of continued attention to his treatment, probably for the rest of his life. WILLIAM B. CASTLE and MORRIS A. BOWIE, Boston (*Journal of the A. M. A.*, June 1, 1929), describe a process by which it is possible for any reasonably intelligent person to make from inexpensive beef liver an extract effective in the treatment of pernicious anemia. The expense of the process, aside from the initial cost of the utensils needed, which are found in most kitchens, is practically the cost of the liver alone. With a little experience the time involved should not be greater than one-half hour daily. The extract so produced should not exceed in amount two ordinary drinking glasses (500 cc.) of a liquid tasting very like beef broth, and almost entirely free from the peculiar flavor of liver which offends many patients. The process is based on the first few steps of the original procedure used by Cohn and his associates in the preparation of their extracts of liver effective in the treatment of pernicious anemia. It can be carried out by the patient.

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THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

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ORIGINAL ARTICLES

COMPOUND FRACTURES

(A STUDY OF 62 CASES)

E. B. MUMFORD, M.D.

INDIANAPOLIS

Compound or open fractures differ from the simple or closed fractures almost entirely in that the former may become infected while the latter rarely if ever are complicated by infection. The permanent impairment following a simple fracture is due to loss of function through pain, shortening, improper alignment, non-union and disturbance in joint motion. Rarely is there loss of limb or life. In compound fractures the same factors enter into the cause of impairment but through infection the complications of delayed union, non-union, osteomyelitis, loss of limb and death may occur. Thus infection becomes the major or most important element in this type of fractures and its control commands the primary place in the plan of treatment, all other factors being of secondary consequence. The infection of the wound with the ordinary pyogenic organisms is serious but when the gas bacillus or the tetanus bacillus enters the field, very grave problems arise. As most compound fractures are the result of a more severe trauma than occurs in simple fractures the element of shock becomes proportionately greater and it alone may be the deciding factor in the end result. It can be stated that a closed fracture is a simple surgical problem in which the treatment depends almost entirely upon the anatomical and physiological knowledge and the mechanical ability of the surgeon; that an open or compound fracture is a major surgical problem in which the treatment depends upon the surgeon's operative skill backed up by a keen judgment in the handling of bruised tissues, a full conception of shock, a thorough anatomical knowledge, a natural mechanical ability, a clear recognition of all phases of infection and a due appreciation of the element of time in its relation to the development of infection.

There cannot be formulated a standardization of treatment in compound fractures as there is not a standardization of this type of fracture. Each case is an individual problem within itself.

The history of the accident is most important as one may determine from it whether the wound of the skin has been made by the bone acting from within out or whether the external object has acted in the reverse manner. In the former the tissues may have been badly contaminated while in the latter there may be but little if any soiling of the soft tissues. The history of the place of the accident may also give some data as to the type of organism in the wound (tetanus bacillus). In the examination attention should be directed to the general condition of the patient (shock), to the extent of the laceration of the soft tissues, to the condition of the circulation distal to the wound and to the involvement of any joints. The condition of the bone is of secondary importance and x-rays can be deferred until a later time.

Before any definite treatment can be begun questions will arise in the mind of the surgeon, many of which can be answered only through experience. Is the patient in such shock that only temporary dressings and splintage should be applied? Shall the wound be considered as potentially clean (bullet wounds) and only sterile dressings be used or shall the wound be considered as infected? If the wound is potentially infected shall it be enlarged and the soft parts debrided or shall an attempt be made to sterilize the wound as it is found? If debridement is done shall the wound be closed or shall it be left open and sterilized with some antiseptic (Dakin solution)? If primary suture is done shall drains be used and if so shall they be merely subcutaneous or extend down to the fracture line? At the time of first operation should an attempt be made to reduce the fracture? If reduction is attempted, should any form of internal fixation (plates, bands, screws, etc.) be used at that time or at a later date, after all danger of infection has passed? Is the possibility of a gas bacillus infection so great that the treatment should be directed primarily to its control (hydrogen peroxide instillation)? Should amputation be done?

The answers to these questions will vary with the opinions of the operators, opinions based upon personal experience and upon the actual conditions found in each particular case. However, on several points in the treatment of compound frac-

tures there will be found almost universal agreement. Contamination with the tetanus bacillus is always to be considered as a possibility and a prophylactic dose of anti-tetanic serum is to be administered (1500 units). If the fracture is made by a bullet of high velocity the wound can be considered clean and the only indication for surgical interference is hemorrhage. Probing for the bullet should never be done until the soft parts have been healed for several days. A clean bullet will cause an infection only when it begins to act as a foreign body of an irritating type and this condition will arise only after a considerable lapse of time. Gas bacillus infection should always be considered as a possibility. It will, however, occur most frequently in those fractures in which there has been a very extensive crushing and tearing of the tissues. It has been shown experimentally that inoculation of soft tissue wounds (in animals) with the anærobic gas organism was followed by violent infection only when calcium or crushed bone was added to the wound. This may explain the greater frequency of gas bacillus infection in compound fractures, and especially those with comminuted crushed bone, as compared with its occurrence in simple, although extensive, lacerations involving the soft tissues alone. In this type of injury the wound should never be closed by primary suture but should be left wide open and the parts irrigated at frequent intervals with hydrogen peroxide. This is best applied with a series of tubes such as used in the Carrel-Dakin method of treatment of infected wound, the tubes reaching well into the lacerated tissues. Five cases of gas bacillus infection were observed in this series. All led to immediate amputations with only one death. Four were very extensive wounds but one case, caused by an explosion of a car of asphalt, had only a small puncture wound. In the case that died the gas bacillus was detected eight hours after the accident and amputation was done immediately.

It will also be agreed generally that shock demands the first attention and that any handling of the patient either operative or otherwise should be so as not to increase this factor as to endanger the life of the patient. If amputation is necessary it should be deferred until the general condition of the patient will permit of this added shock and also until the surgeon is sure that the distal circulation is totally lost.

For purpose of discussion the lesion of compound fracture may be divided into three groups, first, that in which the wound of the soft part is small and may be considered as potentially clean and free of any infection; second, that in which the wound is to be considered as infected but which infection can be controlled by surgical interference; and third, that in which the wound is extensive and the amount of devitalized tissue is so great that one cannot expect to have a clean wound through any surgery or perhaps through

any method of disinfection. In this latter group the shock is always an important factor and the possibility of a gas bacillus infection great.

In the first group we find those compound fractures caused by bullets. As already stated, these wounds usually are sterile and need only simple sterile dressings. Probing for the bullet should be condemned and its removal done only after the wound is healed and all danger of infection has passed. In rare instances the opening of the wound for the control of hemorrhage may be indicated. In this group we also find those compound wounds which are very small and in which it is evident that the chances for contamination of the deeper tissues are very slight. This wound may be made by the sharp edge of a fragment or by a spicule of bone of a comminuted fracture. It is the opinion of most writers that this type of wound made from within out is usually not infected. On the other hand the wound may be from without in. A blunt object or the edge of a sharp object (a fender on the automobile) breaks the skin and fractures the bone but neither the object nor the clothing of the patient are carried into the wound. These cases too are usually sterile and can be treated as such. They are found most frequently in the leg below the knee and in the forearm. The wound should not be opened further nor should an attempt be made to swab out the wound with some antiseptic. The opening should be closed tightly with a small piece of gauze, the skin then carefully shaved and scrubbed with soap and washed with alcohol. The piece of gauze is removed, the skin bathed with ether and a sterile dressing applied. The fracture is then treated as a simple fracture.

The third group represents those very severe types in which there has occurred a marked crushing force. It is the type which comes in railroad accidents or those occurring in the industrial plants in which heavy machinery is used, the steel mills, heavy foundries and mines. Shock is usually great and demands the immediate attention of the surgeon. This is combatted with the shock bed, heat, morphine, blood transfusions, subcutaneous stimulants, enemas of hot coffee, or other means which may seem advisable. During the time in which shock is being combatted the fractured extremity should be splinted quickly. For general purposes the Thomas splint is the best. It can be applied quickly and with but little handling of the patient and permits of free inspection of the wound. The wound should be examined for any free bleeding and the vessels caught with clamps which may be left *in situ*. Copious dressings of hot saline are then applied. As soon as possible the patient is taken to the operating rooms for further treatment of the compound wound. At this time it will be determined whether amputation is indicated or whether the extremity can be saved. If the latter is decided upon, the wound should be explored thoroughly

and that debridement done which is indicated. All fragments of loose bone are to be removed. The fracture is reduced and an attempt made to so place the fragments that alignment and full length will be maintained. The writer believes that no type of mechanical fixation such as wire, screws, plates of any type or intramedullary pegs should be used at the time of first treatment in any compound fracture. Obtain the best position of the fragments possible without internal fixation devices and if this position is not satisfactory wait until the wound has been made bacteriologically clean and then correct the mal-position. Finally the wound should be filled with tubes and Dakin solution applied. At this time it should be emphasized that the Carrel-Dakin method is not one of irrigation but one of instillation. This means that the tubes shall be so placed and so constructed that the solution will reach the tissues at all points. It should also be stated that Dakin solution to be effective should be made fresh each day and must be triturated so that the percentage of hyperchlorid of soda is between 0.45 and 0.50. If weaker than 0.45 percent it is of no value. If stronger than 0.50 percent it will irritate the skin. It must be instilled every two hours. Unless these points are all carried out then one is not using the Carrel-Dakin method of wound disinfection. If gas bacillus infection is under question and smears from the wound drainage are negative the injection of this wound material directly into the liver of the guinea pig will show organisms in six to eight hours.

One of the most serious problems which confronts the surgeon is when one of the weight-bearing joints is badly involved in the trauma and especially when infection occurs. It is a question as to whether amputation should be done or whether the patient should be given the opportunity to decide this loss of extremity for himself at a later date. We all know that a joint which has had a severe fracture requires a very long time before it will permit of long-continued weight bearing. This is often demonstrated in the fractures of the bones of the mid-foot, the calcaneum, the astragalus as well as the lower and upper ends of the tibia. Eighteen months to two or even more years are not uncommon lengths of time before the patient is free of pain and not infrequently he will even then be unable to take up heavy work. We all also recognize the fact that an artificial leg will not permit a man to carry on heavy work for any length of time and that most users of prosthetic appliances eventually seek lighter work. Thus the end result so far as occupation is concerned is practically the same either with or without amputation. With amputation, however, there is much less suffering on the part of the patient, the period of hospitalization and convalescence is considerably shortened and the patient more quickly adapts his life to the impairment. To advise for or against am-

putation thus requires careful study of the individual case as to the extent of the wound, the possible end result, the age of the patient as to the expectance of working years, and the social and economic conditions. Again surgical judgment and personal experience will count for much in the final decision.

In the treatment of the first and the third groups of compound fractures there are not many differences of opinion among the surgeons, but in the plan of treatment for the second group there will be found several points of controversy. About the only general agreement is the fact that no one method is perfect, that all methods fail in a certain percentage of cases. The differences of opinion fall largely about the question of debridement and primary suture, the use of chemical disinfectants, the use of internal fixation devices and the time of reduction of the fracture. Each surgeon has his own method and while some seem to be satisfied with the end results obtained many others confess that they are not so fortunate in their work. Sherman, who has a very large experience in compound fractures, teaches his staff covering the steel mills that all compound fractures are potentially infected, that primary suture should be done only in very selected cases which are comparatively few; that practically all should be opened and debrided and then made bacteriologically clean with Dakin solution, and that internal fixation methods can be used early with safety. His viewpoint may be affected by the large number of cases which would fall in the third group of compound fractures. Sterne is apparently satisfied to clean the skin, replace the fragments and keep them in fixation; at a later time he attempts a reduction of the fracture. Scudder thinks that a primary suture should be attempted only in those small puncture wounds which are obviously not infected and which are seen within ten hours of the accident. Orr and Shrock do as little debridement as possible but reduce the fracture at once. Very few are satisfied with merely swabbing out the wound with iodine or some other disinfectant and leaving the wound open with a drain. Many feel that a thorough debridement followed by primary sutures, without drains, is the best method. In practically all of the literature reviewed it was noted that the writers gave their opinion as to the method of treatment but did not give their experience as to the control of infection by the use of such treatment. And it is this control of the infection which, in the writer's opinion, is the most important factor in treatment and which determines whether a method has or has not merit.

Cook reviewed one hundred and sixteen cases of compound fractures in the New Haven Hospital from 1913 to 1923. He divides the types of treatment into four groups: First, that of aseptic occlusion, in which the field of the wound was washed and cleaned,

TRUTH ABOUT MEDICINES

(Continued from page 306)

it is marketed on unwarranted therapeutic claims. (*Journal of the A. M. A.*, May 25, 1929, p. 1783).

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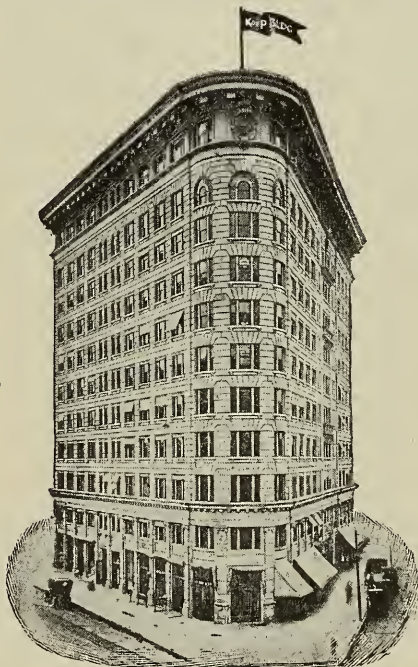
June 1, 1929), resected 19 feet of small bowel. A rapid entero-enterostomy was done, the small intestine being anastomosed to the cecum with a fairly large opening and with two rows of sutures. Convalescence was uneventful. One year later the patient was seen by William W. Washburn, San Francisco. Symptoms of intestinal obstruction led to a second operation. Close to the cecum were found a few old adhesions and one thick band which encircled the small bowel, about 4 cm. from its termination in the cecum. The adhesions were freed, relieving the obstruction. Since then the patient has been entirely well.

DOMESTIC LIVER EXTRACT FOR USE IN PERNICIOUS ANEMIA

The sufferer from pernicious anemia, like the diabetic patient, must frankly face the necessity of continued attention to his treatment, probably for the rest of his life. WILLIAM B. CASTLE and MORRIS A. BOWIE, Boston (*Journal of the A. M. A.*, June 1, 1929), describe a process by which it is possible for any reasonably intelligent person to make from inexpensive beef liver an extract effective in the treatment of pernicious anemia. The expense of the process, aside from the initial cost of the utensils needed, which are found in most kitchens, is practically the cost of the liver alone. With a little experience the time involved should not be greater than one-half hour daily. The extract so produced should not exceed in amount two ordinary drinking glasses (500 cc.) of a liquid tasting very like beef broth, and almost entirely free from the peculiar flavor of liver which offends many patients. The process is based on the first few steps of the original procedure used by Cohn and his associates in the preparation of their extracts of liver effective in the treatment of pernicious anemia. It can be carried out by the patient.

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ORIGINAL ARTICLES

COMPOUND FRACTURES

(A STUDY OF 62 CASES)

E. B. MUMFORD, M.D.

INDIANAPOLIS

Compound or open fractures differ from the simple or closed fractures almost entirely in that the former may become infected while the latter rarely if ever are complicated by infection. The permanent impairment following a simple fracture is due to loss of function through pain, shortening, improper alignment, non-union and disturbance in joint motion. Rarely is there loss of limb or life. In compound fractures the same factors enter into the cause of impairment but through infection the complications of delayed union, non-union, osteomyelitis, loss of limb and death may occur. Thus infection becomes the major or most important element in this type of fractures and its control commands the primary place in the plan of treatment, all other factors being of secondary consequence. The infection of the wound with the ordinary pyogenic organisms is serious but when the gas bacillus or the tetanus bacillus enters the field, very grave problems arise. As most compound fractures are the result of a more severe trauma than occurs in simple fractures the element of shock becomes proportionately greater and it alone may be the deciding factor in the end result. It can be stated that a closed fracture is a simple surgical problem in which the treatment depends almost entirely upon the anatomical and physiological knowledge and the mechanical ability of the surgeon; that an open or compound fracture is a major surgical problem in which the treatment depends upon the surgeon's operative skill backed up by a keen judgment in the handling of bruised tissues, a full conception of shock, a thorough anatomical knowledge, a natural mechanical ability, a clear recognition of all phases of infection and a due appreciation of the element of time in its relation to the development of infection.

There cannot be formulated a standardization of treatment in compound fractures as there is not a standardization of this type of fracture. Each case is an individual problem within itself.

The history of the accident is most important as one may determine from it whether the wound of the skin has been made by the bone acting from within out or whether the external object has acted in the reverse manner. In the former the tissues may have been badly contaminated while in the latter there may be but little if any soiling of the soft tissues. The history of the place of the accident may also give some data as to the type of organism in the wound (tetanus bacillus). In the examination attention should be directed to the general condition of the patient (shock), to the extent of the laceration of the soft tissues, to the condition of the circulation distal to the wound and to the involvement of any joints. The condition of the bone is of secondary importance and x-rays can be deferred until a later time.

Before any definite treatment can be begun questions will arise in the mind of the surgeon, many of which can be answered only through experience. Is the patient in such shock that only temporary dressings and splintage should be applied? Shall the wound be considered as potentially clean (bullet wounds) and only sterile dressings be used or shall the wound be considered as infected? If the wound is potentially infected shall it be enlarged and the soft parts debrided or shall an attempt be made to sterilize the wound as it is found? If debridement is done shall the wound be closed or shall it be left open and sterilized with some antiseptic (Dakin solution)? If primary suture is done shall drains be used and if so shall they be merely subcutaneous or extend down to the fracture line? At the time of first operation should an attempt be made to reduce the fracture? If reduction is attempted, should any form of internal fixation (plates, bands, screws, etc.) be used at that time or at a later date, after all danger of infection has passed? Is the possibility of a gas bacillus infection so great that the treatment should be directed primarily to its control (hydrogen peroxide instillation)? Should amputation be done?

The answers to these questions will vary with the opinions of the operators, opinions based upon personal experience and upon the actual conditions found in each particular case. However, on several points in the treatment of compound frac-

tures there will be found almost universal agreement. Contamination with the tetanus bacillus is always to be considered as a possibility and a prophylactic dose of anti-tetanic serum is to be administered (1500 units). If the fracture is made by a bullet of high velocity the wound can be considered clean and the only indication for surgical interference is hemorrhage. Probing for the bullet should never be done until the soft parts have been healed for several days. A clean bullet will cause an infection only when it begins to act as a foreign body of an irritating type and this condition will arise only after a considerable lapse of time. Gas bacillus infection should always be considered as a possibility. It will, however, occur most frequently in those fractures in which there has been a very extensive crushing and tearing of the tissues. It has been shown experimentally that inoculation of soft tissue wounds (in animals) with the anærobic gas organism was followed by violent infection only when calcium or crushed bone was added to the wound. This may explain the greater frequency of gas bacillus infection in compound fractures, and especially those with comminuted crushed bone, as compared with its occurrence in simple, although extensive, lacerations involving the soft tissues alone. In this type of injury the wound should never be closed by primary suture but should be left wide open and the parts irrigated at frequent intervals with hydrogen peroxide. This is best applied with a series of tubes such as used in the Carrel-Dakin method of treatment of infected wound, the tubes reaching well into the lacerated tissues. Five cases of gas bacillus infection were observed in this series. All led to immediate amputations with only one death. Four were very extensive wounds but one case, caused by an explosion of a car of asphalt, had only a small puncture wound. In the case that died the gas bacillus was detected eight hours after the accident and amputation was done immediately.

It will also be agreed generally that shock demands the first attention and that any handling of the patient either operative or otherwise should be so as not to increase this factor as to endanger the life of the patient. If amputation is necessary it should be deferred until the general condition of the patient will permit of this added shock and also until the surgeon is sure that the distal circulation is totally lost.

For purpose of discussion the lesion of compound fracture may be divided into three groups, first, that in which the wound of the soft part is small and may be considered as potentially clean and free of any infection; second, that in which the wound is to be considered as infected but which infection can be controlled by surgical interference; and third, that in which the wound is extensive and the amount of devitalized tissue is so great that one cannot expect to have a clean wound through any surgery or perhaps through

any method of disinfection. In this latter group the shock is always an important factor and the possibility of a gas bacillus infection great.

In the first group we find those compound fractures caused by bullets. As already stated, these wounds usually are sterile and need only simple sterile dressings. Probing for the bullet should be condemned and its removal done only after the wound is healed and all danger of infection has passed. In rare instances the opening of the wound for the control of hemorrhage may be indicated. In this group we also find those compound wounds which are very small and in which it is evident that the chances for contamination of the deeper tissues are very slight. This wound may be made by the sharp edge of a fragment or by a spicule of bone of a comminuted fracture. It is the opinion of most writers that this type of wound made from within out is usually not infected. On the other hand the wound may be from without in. A blunt object or the edge of a sharp object (a fender on the automobile) breaks the skin and fractures the bone but neither the object nor the clothing of the patient are carried into the wound. These cases too are usually sterile and can be treated as such. They are found most frequently in the leg below the knee and in the forearm. The wound should not be opened further nor should an attempt be made to swab out the wound with some antiseptic. The opening should be closed tightly with a small piece of gauze, the skin then carefully shaved and scrubbed with soap and washed with alcohol. The piece of gauze is removed, the skin bathed with ether and a sterile dressing applied. The fracture is then treated as a simple fracture.

The third group represents those very severe types in which there has occurred a marked crushing force. It is the type which comes in railroad accidents or those occurring in the industrial plants in which heavy machinery is used, the steel mills, heavy foundries and mines. Shock is usually great and demands the immediate attention of the surgeon. This is combatted with the shock bed, heat, morphine, blood transfusions, subcutaneous stimulants, enemas of hot coffee, or other means which may seem advisable. During the time in which shock is being combatted the fractured extremity should be splinted quickly. For general purposes the Thomas splint is the best. It can be applied quickly and with but little handling of the patient and permits of free inspection of the wound. The wound should be examined for any free bleeding and the vessels caught with clamps which may be left *in situ*. Copious dressings of hot saline are then applied. As soon as possible the patient is taken to the operating rooms for further treatment of the compound wound. At this time it will be determined whether amputation is indicated or whether the extremity can be saved. If the latter is decided upon, the wound should be explored thoroughly

and that debridement done which is indicated. All fragments of loose bone are to be removed. The fracture is reduced and an attempt made to so place the fragments that alignment and full length will be maintained. The writer believes that no type of mechanical fixation such as wire, screws, plates of any type or intramedullary pegs should be used at the time of first treatment in any compound fracture. Obtain the best position of the fragments possible without internal fixation devices and if this position is not satisfactory wait until the wound has been made bacteriologically clean and then correct the mal-position. Finally the wound should be filled with tubes and Dakin solution applied. At this time it should be emphasized that the Carrel-Dakin method is not one of irrigation but one of instillation. This means that the tubes shall be so placed and so constructed that the solution will reach the tissues at all points. It should also be stated that Dakin solution to be effective should be made fresh each day and must be triturated so that the percentage of hyperchlorid of soda is between 0.45 and 0.50. If weaker than 0.45 percent it is of no value. If stronger than 0.50 percent it will irritate the skin. It must be instilled every two hours. Unless these points are all carried out then one is not using the Carrel-Dakin method of wound disinfection. If gas bacillus infection is under question and smears from the wound drainage are negative the injection of this wound material directly into the liver of the guinea pig will show organisms in six to eight hours.

One of the most serious problems which confronts the surgeon is when one of the weight-bearing joints is badly involved in the trauma and especially when infection occurs. It is a question as to whether amputation should be done or whether the patient should be given the opportunity to decide this loss of extremity for himself at a later date. We all know that a joint which has had a severe fracture requires a very long time before it will permit of long-continued weight bearing. This is often demonstrated in the fractures of the bones of the mid-foot, the calcaneum, the astragalus as well as the lower and upper ends of the tibia. Eighteen months to two or even more years are not uncommon lengths of time before the patient is free of pain and not infrequently he will even then be unable to take up heavy work. We all also recognize the fact that an artificial leg will not permit a man to carry on heavy work for any length of time and that most users of prosthetic appliances eventually seek lighter work. Thus the end result so far as occupation is concerned is practically the same either with or without amputation. With amputation, however, there is much less suffering on the part of the patient, the period of hospitalization and convalescence is considerably shortened and the patient more quickly adapts his life to the impairment. To advise for or against am-

putation thus requires careful study of the individual case as to the extent of the wound, the possible end result, the age of the patient as to the expectance of working years, and the social and economic conditions. Again surgical judgment and personal experience will count for much in the final decision.

In the treatment of the first and the third groups of compound fractures there are not many differences of opinion among the surgeons, but in the plan of treatment for the second group there will be found several points of controversy. About the only general agreement is the fact that no one method is perfect, that all methods fail in a certain percentage of cases. The differences of opinion fall largely about the question of debridement and primary suture, the use of chemical disinfectants, the use of internal fixation devices and the time of reduction of the fracture. Each surgeon has his own method and while some seem to be satisfied with the end results obtained many others confess that they are not so fortunate in their work. Sherman, who has a very large experience in compound fractures, teaches his staff covering the steel mills that all compound fractures are potentially infected, that primary suture should be done only in very selected cases which are comparatively few; that practically all should be opened and debrided and then made bacteriologically clean with Dakin solution, and that internal fixation methods can be used early with safety. His viewpoint may be affected by the large number of cases which would fall in the third group of compound fractures. Sterne is apparently satisfied to clean the skin, replace the fragments and keep them in fixation; at a later time he attempts a reduction of the fracture. Scudder thinks that a primary suture should be attempted only in those small puncture wounds which are obviously not infected and which are seen within ten hours of the accident. Orr and Shrock do as little debridement as possible but reduce the fracture at once. Very few are satisfied with merely swabbing out the wound with iodine or some other disinfectant and leaving the wound open with a drain. Many feel that a thorough debridement followed by primary sutures, without drains, is the best method. In practically all of the literature reviewed it was noted that the writers gave their opinion as to the method of treatment but did not give their experience as to the control of infection by the use of such treatment. And it is this control of the infection which, in the writer's opinion, is the most important factor in treatment and which determines whether a method has or has not merit.

Cook reviewed one hundred and sixteen cases of compound fractures in the New Haven Hospital from 1913 to 1923. He divides the types of treatment into four groups: First, that of aseptic occlusion, in which the field of the wound was washed and cleaned,

and the skin surrounding the wound treated with an antiseptic solution and the wound swabbed with iodine and a sterile dressing applied. Sixty-eight cases were so treated and twenty-seven (40 percent) became infected. Three cases required amputation. The second group had drainage, the field having been first cleaned and treated with antiseptic solutions, the wound being left open for drainage purposes. Nine cases were so treated and it may be presumed that all had some degree of infection as three cases required further drainage, one case amputated, three cases required sequestrectomy and one case died. The third group had Carrel-Dakin treatment. Eight cases were in this group. At least four had definite infection. The fourth group had debridement with closure or with small rubber tissue drain which was removed at the end of twenty-four hours. Twenty-three cases were in this group. Two cases died from gas bacillus infection and two cases required amputation from the same type of infection; four cases had evidently frank infection (25 percent infected). In the cases of debridement and primary suture treated successfully, the time of healing averaged twenty-two days; in those treated successfully by aseptic occlusion the wounds were healed in an average time of sixty-two days; those cases which healed following drainage without subsequent operation did so on an average of 117 days; the cases treated by the Carrel-Dakin method healed in an average of 130 days.

Depressed by the large number of infections with their disastrous complications of delayed and non-union, osteomyelitis and even loss of limb and life which occurred in the compound fractures, the writer began a series of this type of injury in which advantage was taken of the experience and teachings obtained in the World War in the treatment of lacerated wound by the method of debridement and primary suture. A report of twenty-one compound fractures so treated was made before the Indiana State Medical Association in 1921. In the twenty-one cases primary union was obtained in twenty without any signs of infection and even in the one infected case the end result was good as to function. There were no deaths nor any gas bacillus infections nor any amputations. This experience made one feel that the problem was solved and that compound fractures could be considered as being only slightly more serious than the simple or closed fractures. A study of the next sixteen cases dispelled this idea as there occurred five infections, three being of the gas bacillus type, all leading to amputation with one death. The present report is based upon a study of sixty-two cases of compound fractures. There were nine infections (14.5 percent). Five of the infections occurred in cases in which some metallic form of internal fixation was used. In three of these cases non-union occurred (one amputation and two bone grafts). With this high

percentage of infection with the use of internal fixation at the time of the initial operation the method is condemned and the writer firmly believes that at the time of the first operation the fragments should be placed in the best possible position but that any necessary internal fixation should be deferred until all infection has been overcome. Only four infections occurred in which debridement and primary suture was done without the use of internal fixation. In these four cases the bone infection was that of an osteitis and not an osteomyelitis—due no doubt to the formation of the intramedullary plug before the infection began. All these cases eventually recovered with good function. This series does not include three cases which would fall under the first group, cases in which it was evident that we had no infection and which were treated with simple dressings, the wound being left undisturbed. Two of the gas bacillus cases would fall under the third group. The third gas bacillus case was a very small puncture wound and was considered as of the first group type.

The debridement and primary suture method of treatment consisted of thorough cleansing of the skin with soap and water, enlargement of the wound, evacuation of all blood clots, careful debridement of all tissues which were apparently devitalized to any extent, reduction of the fracture to the best position possible, filling of the wound with ether and then carefully closing the soft parts with interrupted sutures of chromic No. 1 catgut, attempt being made to restore the anatomical relationship of the tissues and finally closing the skin with a continuous suture of catgut. No drains are inserted into the wound. A plaster cast is applied to give complete immobilization to the parts (a double spica being used for fracture of the tibia as well as those of the femur). Very little attention is paid to the elevation of the temperature during the first two days. The indications for inspection of the wound are those of local pain and throbbing together with a continued rise of temperature. At the time of first inspection if there appears to be only a superficial infection a small probe is inserted between the sutures or perhaps one of the sutures is cut. If there is found to be a deep infection the wound is opened widely and an instillation of Dakin solution begun.

The following conclusions have been made from the study of this series of cases:

First: In the cases of the first group only simple dressings are necessary and the wound is not to be disturbed.

Second: In the cases of the second group the most satisfactory treatment is by debridement and primary suture; that in this method deep drains are not used; that internal fixation is contra-indicated; that careful observation with special attention directed to the local symptoms will give knowledge of any infection and that if drainage

is given at once there occurs only an osteitis and not an osteomyelitis.

Third: That the method of debridement should be done only by those who have had experience in debridement and is not to be attempted by the average physician or untrained surgeon.

Fourth: In the cases of the third group the debridement should be limited, the wound left wide open for drainage and gas bacillus infection should be considered potential.

Fifth: Amputation is the best means of combating gas bacillus infection.

Sixth: Prophylactic doses of anti-tetanic serum should be administered in all cases.

EMBOLISM OF THE LEG

(CASE REPORT)

J. R. CROWDER, M.D.
SULLIVAN

While embolism of the extremities is fairly common in diseases of the heart and arteries, and has been reported as following rheumatic fever, pneumonia, erysipelas, typhoid, puerperal infection, umbilical infection in children, diphtheria, nephrectomy and perhaps other conditions, I have been unable to find report of any case following blood transfusion.

The source of such emboli are given by Dr. John J. Pemberton in the *Annals of Surgery*, of May, 1928, as:

1. A central spot in the arterial tree.
2. The left side of the heart.
3. The pulmonary veins.
4. The right side of the heart.
5. The systemic veins.

The last two (4 and 5) are possible only in the presence of a patent foramen ovale. Diseases of the heart probably account for more than eighty percent of all reported cases.

Case Report: Mrs. P., age forty-four; American, Protestant, married twenty-eight years; five children, all well. Father died at age of sixty-nine of pneumonia; mother at sixty-five, of typhoid. Two brothers and one sister living and well. None dead. She has had ordinary diseases of childhood and an attack of typhoid when fourteen years of age. With that exception she has had good health until about five years ago, when she noticed that menstruation became a little profuse. This gradually progressed, until during the past year bleeding was more or less constant.

Examination: A fairly well-nourished woman, with pale skin, pulse 90, resp. 24, temp. 98.2. Head, neck, mouth, and throat negative. The chest is well formed and free of rales or other evidence of disease. The heart seems to be of normal size, the tones are clear and the rhythm regular. The abdomen is normal on palpation and inspection. On vaginal examination the uterus seems rather large but smooth and symmetrical. There is some fixation and increased resistance

along the broad ligaments. The cervix is lacerated.

Blood Examination — Red 2,348,000, white 6,000, Hemo. 55 percent, N. 72 percent, S. M. 28 percent. The red cells are slightly irregular. Urine—Sp. Gr. 1030, acid reaction, no sugar, no albumen, contains a very few pus cells and squamous epithelium.

On October 8th the abdomen was opened by a midline incision and cystic ovaries with adherent tubes were removed. At the beginning of the operation the blood pressure was 112/60 and the pulse 72. At the close it registered 116/60, and the pulse 86. Two thousand cc. of normal salt solution were given subcutaneously during the operation. On the following day the temperature reached 100.4 and the pulse 96. During the next five days the temperature continued slightly above normal, the highest point being 101 and the lowest 99. The pulse was 90 to 110, and the respiration 20 to 25. Nausea and vomiting were rather severe during this period. The blood count was as follows:

Oct. 10—Hemo. 30%—Red 2,884,000, White 11,200
Oct. 11—Hemo. 30%—Red 2,752,000, White 9,400
Oct. 12—Hemo. 30%—Red 3,088,000, White 6,400
Oct. 13—Hemo. 30%—Red 2,328,000, White 4,800

The urine continued normal. Inasmuch as hemoglobin was recorded as 55 percent before operation, and was 30 percent the day following, without loss of blood at the operation, we were of the opinion that the first reading was a laboratory error. We did not consider the temperature to indicate an abdominal infective process, but rather due to her extreme anemia and surgical reaction. On October 14th she was given 500 cc. of blood by direct method, the blood being furnished by her husband. Both were in group IV, and clumping was tested by serum crossed both ways. Shortly after returning to her room the patient had a slight chill, and the temperature reached 102, pulse 104, respiration 24. Within a short time all symptoms subsided and from this time until October 20th she was much more comfortable, the vomiting ceased, and she seemed much improved. The temperature range was 99 to 100, pulse 90 to 100, and respiration 20.

The blood:

10-15-'28—H. 40%, R. 3,416,000, W. 6,200
10-17-'28—H. 40%, R. 3,672,000, W. 4,800

The urine continued normal.

On the morning of October 20th she said that during the night she had felt a pain in the big toe of the right foot, but that it had disappeared, and she was feeling quite well. About two o'clock in the afternoon she complained of a severe pain in the right leg and foot. When I saw her, about five p. m., the leg and thigh were swollen, and the skin up to about the knee had a mottled bluish appearance. Above the knee the capillary circulation was very sluggish. There was severe pain, and sensation and motion in the foot and leg were

disturbed. The foot and leg were cold. We were unable to get pulsation in the arteries of the leg or thigh. The pulse rose rapidly after this to 120 or 130, and the quality was bad. We were of the opinion that we had an embolus within the abdomen.



The toes and about half the foot developed gangrene. The general condition of the patient gradually improved, and on December 5th an attempt was made to amputate dead tissue and save a part of the foot, but an infected stump was the result, and on April 8, 1929, the leg was amputated in the lower third without difficulty. The patient is now in normal health with blood picture normal.

As this case presents no evidence of a cardiac lesion, and apparently there was no pelvic infection, we have supposed that we had a thrombus form in the left heart as the result of transfusion.

GWATHMEY TECHNIQUE FOR SYNERGISTIC ANALGESIA IN PRIMIPARAE

JAMES C. CARVER, M.D.
HAMMOND

A brief review of the technique as applied for primiparæ in this series is as follows:

1. When the pains are regular at three to six-minute intervals and lasting in their acme about fifteen seconds, the cervix being three to four fingers dilated, an intramuscular injection of 1/6 grain of morphine dissolved in 2 cc. of magnesium sulphate is administered.

2. A high warm soap-suds enema follows, and time is given for complete evacuation.

3. If the effect of the morphine is minimal the magnesium sulphate is repeated in the same dosage one-half to three-fourths of an hour following the first injection.

4. A high slow colon retention enema is then

given by catheter inserted above the presenting part. This consists of the following:

- | | |
|--------------------------|-------------|
| (1) Quinine hydrobromide | (grains 20) |
| Alcohol | (drams 3) |
| (2) Ether | (ounces 2½) |
| Olive oil | (ounces 1) |

Mix one and two before injecting.

5. The room is then darkened, quiet is enjoined and an attendant assigned to sit quietly by the patient to observe the progress of labor.

6. Repeat the magnesium sulphate every two to four hours as indicated by return of pain.

7. In the event labor lasts more than four hours from the time of administration of the retention enema, or if enough is expelled to shorten the effect of the ether, the same formula or half quantity of it may be repeated by retention enema.

8. It is frequently possible to deliver the baby while a dry ether mask is simply pressed over the face of the woman to allow for rebreathing the exhaled ether. The majority, however, will require a few drops of ether on the mask to decrease the exquisite pain of actual delivery.

In the home one waits until the woman is in obvious distress with the pains, and the husband is beginning to pace the back porch and regret. Then if the cervix is over three, fingers dilated and showing progressive thinning, and the pains regular, the intramuscular morphine in magnesium sulphate is given.

When the ensuing cleansing enema has been expelled completely, the magnesium sulphate is repeated if definite relief of pain has not yet been felt. The woman is then turned on her left side, the buttocks smeared widely with petroleum (to prevent burning of the skin by the ether in case of leakage) and the catheter passed high in the rectum above the presenting part. The formula is then allowed to pass very slowly through the catheter, pinching it off during the contractions of labor. It has been my experience that the more slowly and painstakingly this is administered the more perfect will be the retention. From one-half to one hour should be consumed in its instillation. By the time the first ounce of the formula has passed into the rectum, there is a distinct odor of ether on the breath, and if our patient is undisturbed by outside influences, she is so relieved in the ideal case that she sleeps between pains.

After administering the complete formula, the darkened, quiet room is vacated and the physician retires to the dining-room, adjacent to read the "True Fable" magazines in the domestic library, and listen to the good neighbor housewife relate the appalling incidents of her own multiple pregnancies.

The patient, if analgesia is satisfactory, sleeps between pains. The onset of a contraction is heralded, not by the harrowing scream of pain, but

by a slight stir on the bed, accompanied by a low moan, but the patient does not appear to awaken. However, at any time she may be aroused readily and will talk intelligibly, or she may voluntarily ask for a drink of water, bed-pan, or other minor desires. The contractions appear to me to be as strong as they might be otherwise, and their frequency and duration progress in the usual manner. Labor passes as readily as in any case to the second stage, the onset of which is apparent only by watching for objective signs, as the patient is not aware of increased pain. When the presenting part is being born over the perineum, I personally prefer to use a few whiffs of ether by inhalation to augment the relaxation of the perineal musculature, but in four of our cases we have had practically painless delivery by simply keeping the dry mask well surrounded by a moist towel over the face. Chloroform is contra-indicated at any stage of labor using this technique, due to the familiar increased depression of the infant's cerebral functions by the use of chloroform following absorption of morphine by the mother.

After delivery, the mother is apprised immediately of the arrival of her offspring, and if no inhalation anesthesia has been used is entirely conscious of its significance. A cleansing warm water enema is advised following delivery to inhibit further and unnecessary narcosis. After being prepared for the post-puerperal period in the usual way, the mother is again left alone, and may enjoy a restful sleep for a number of hours.

Twenty-five consecutive private, unselected primiparæ were conducted through labor using the above method. Twelve of these were delivered in the home under my direct supervision. The remaining thirteen were conducted in the hospital—four by myself and nine by the internes or supervisor on my orders. Labor lasted from two to eighteen hours after instillation of the formula in our series. It was found necessary to repeat the formula by enema in three cases. One case was allowed to recover entirely from the effect of the medication six hours before delivery took place. In the latter the time of delivery was incorrectly estimated and the technique begun too soon. The ideal time to begin the use of the above outlined therapy is four hours before the estimated time of delivery.

Of the twenty-five cases we have twenty-three living babies and twenty-five living mothers. The two labors resulting in dead babies were unrelated to the use of the Gwathmey technique. The first was due to intra-uterine asphyxia from a definitely strangulated umbilical cord. The second death is accounted for by delay in extraction of the after coming head from an obese primipara thirty-nine years of age with a rigid perineum. There was no noticeable delay in the advent of respiration in the new born except in one case. This baby was five weeks premature and weighed

four pounds, six ounces. He caused us considerable anxiety for a half hour but eventually acquired independent respiration and now weighs sixteen pounds at six months.

The age of mothers ranged from sixteen to thirty-nine, all primiparæ. In three cases labor was induced by the use of quinine and castor oil. The occiput presented in twenty-three cases—two of which failed to rotate spontaneously from posterior positions and were delivered with forceps. Two presented the breech, one of these resulting in one of our fetal deaths. There were no twins. Labor was not delayed to an appreciable extent in any. The contractions continued as often and were equally effective in propelling the presenting part through the birth canal as if nothing extraordinary had been done. The tonic effect of the quinine seems to slightly more than counteract the depressant effect of the ether and morphine on the uterine musculature. There has been no unusual nausea or vomiting in this series and no cases of rapid pulse, pallor, cold sweats or other alarming symptoms. Blood pressure readings were not taken in this group during labor. Two mild pre-eclamptic toxemias showed no increase or decrease in symptoms following the advent of the treatment.

We have had in one-third of our patients some leakage of the formula from the rectum. In none have we observed any burn of the skin over the buttocks. Leakage was more frequent where the preparatory cleansing enema was not completely expelled or the retention enema too hastily administered. In no case was there enough leakage to decrease the effectiveness of the agents used. There was no instance of irritated colon, though when we first used the formula we rather feared this complication. Psychic disturbances were moderate in two, occurring in both during the administration of the retention enema. These reactions consisted of a mild restlessness, comparable in a lesser degree to the restlessness of the second part of the first stage of ether anesthesia given by inhalation. Lacerations were no more frequent than the author ordinarily expects. Our difficult breech delivery through the rigid perineum resulted in a third degree tear. Repairs were made with a few whiffs of inhalation ether—very much less being necessary than for the untreated repair case. It is my impression that there was no noticeable increase in uterine hemorrhage following delivery, and no case of troublesome bleeding occurred among the twenty-five cases. The stay in the hospital averaged twelve days, the minimum being ten and the maximum, allowing for healing of the third degree laceration, being eighteen days. No instance of abscess at the site of injection of the magnesium sulphate was noted, though these injections varied in number from two to five in the course of maintaining the analgesia.

The usual contra-indications to ether, and morphine, and to colonic medication, though kept in mind, were not met with in this series. Had we, however, attempted to use these measures in the face of a condition of colitis, diabetes, or other obvious contra-indications, the results can only be conjectured.

In considering each individual case I have checked eighteen of our cases as being eminently satisfactory, the pain being practically abolished and the patient benefiting by the rest allowed. There were, in addition to these, six cases in which relief of a lesser degree, though definite, was experienced, though pain still persisted to a degree. One woman was apparently not relieved in the least. For this last patient, weighing 160 pounds, I foolishly was prevailed upon by her husband (a man who took a premedic course in college and was consequently quite obnoxious in his self-styled consulting capacity) to administer only one-eighth grain of morphine at the onset. Following this he continued to annoy and disturb his wife so constantly that she was unable to rest even had she had adequate medication. It was rather amusing to find that he was distraught for days with the horrifying thought that by his permitting me to give morphine at all he had in all probability plunged his wife over into the abyssal depths of dope addiction.

This last case illustrated two points that are the chief object of this paper, to-wit:

A. If the dosage of morphine is not varied according to the weight of the patient, pain will remain in direct proportion as the weight of the patient, *i. e.*, a woman weighing 170 pounds will have a great deal more pain persisting after the method is induced than will a woman weighing 100 pounds if the same dose of morphine is used in both.

B. The less the patient is disturbed by excitement, noise or inquiries after her comfort, and the more composed, quiet, comfortable and dark her surroundings, the more gratifying will be our results. I cannot stress too much the value of these last accessory measures. Success or failure may hang entirely on our ability to gain the cooperation of the family and attendants.

Although no figures are available to show the weight of these twenty-five women, yet in reviewing the results I note that the partial failures were all in the larger women—those over 135 pounds estimated weight, while those who had satisfactory relief of pain might all be classified below that figure.

Having now reviewed our cases in this short series, using an entirely standard regime, I feel that in the future we can increase our proportion of excellent results by individualizing our cases. The small women will get from one-eighth to one-sixth grain of morphine while the larger women may be found to require from one-fourth to one-third grain of morphine.

Summary and conclusions:

1. In twenty-five consecutive primiparæ, Gwathmey's technique for synergistic analgesia resulted in almost total relief of pain in eighteen, and considerable but definite relief in six.

2. Success depends on the degree of quiet maintained during the analgesia and on individualization of morphine dosage.

3. No complications attributable to the use of this method were observed.

4. It is a means of decreasing the pains of labor adaptable to use in the home or hospital and requires little equipment, expense, or experience.

STYES*

By B. D. RAVDIN, M. D.
EVANSVILLE

Stye, or external hordeolum, is a localized inflammatory condition of the free margin of the lid involving as a rule the glands of the follicle of the cilia, namely Zeiss's Gland, and most frequently terminating in suppuration.

Styes are seen as a general rule more often in children and young adults. They occur singly; are prone to re-occur in crops and in rapid succession, one after another. Irrespective of the etiology of styes, the symptom complex is identical. There is an initial feeling of heat and burning of the edge of the lids with subsequent desire to rub the eye on account of the itching that is present. As time goes on the lid becomes quite red and angry. Pain as a rule is felt in one localized spot, which changes from the initial sharp cutting type resembling the presence of a foreign body, to a dull and constant throbbing. This persists until a small yellowish discoloration becomes visible on the free margin of the lid. As suppuration continues the pain is relieved either by spontaneous rupture or by surgical intervention.

The cause of styes may be attributed to a number of conditions. As oculists we are prone to consider styes due in a measure to errors of refraction in a certain percentage of our cases and I feel sure that the personal experience of you gentlemen will bear out my statement. However, I do not feel that the percentage is as great as some authors would lead us to believe. The careful refraction of many of the cases reveals hyperopia or compound hyperopic astigmatism, which when properly corrected entirely relieves the patient of this most annoying condition.

Blepharitis marginalis with its accompanying symptoms and signs of redness, swelling, itching, and exudation, resembling to all intents a true eczema, predisposes the individual to the development of styes. With the lowering of local tissue resistance, the ever lurking staphylococcus is furnished an ideal culture media for multiplication. Blepharitis aggravated by the use of the eyes

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for close work would again point the way to suitable refraction for the solution. Chronic catarrhal conjunctivitis and lacrimal duct affections predispose to the development of styes. Persistent unilateral formation of styes should lead us to investigate the nasal mucous membrane and sinuses on that side for the possible cause.

Repeated crops of styes are frequently seen in children or young adults with habitual constipation or chronic intestinal disturbance. It is frequently seen associated with or caused by improper diets, especially where there is a deficiency of vitamins and an excess of carbohydrates and starches.

Secondary anemia and menstrual disorders are frequently responsible for repeated stye developments.

That foci of infection of teeth, tonsils and accessory sinuses are responsible for many cases of styes, I am firmly convinced from personal observation. The *modus operandi* of these infections is not definitely known. It may be due to a general lack of body resistance from the constant absorption of toxins, which predisposes certain individuals to develop styes, or we may try to explain these developments by a direct propagation of infected material by way of the blood vessels.

If one carefully reviews the venous blood supply of the eyelids, certain of the accessory sinuses, and the teeth, we find a very definite relationship and connection of many of these vessels.

The veins of the eyelids are divided into two groups, the deeper retro-tarsal veins emptying into the branches of the ophthalmic vein and the more superficial pretarsal veins emptying into the frontal and facial veins medially and into the supra-orbital and superficial temporal veins laterally.

The lymphatics of the eyelids consist of a pre- and post-tarsal set passing to the parotid and submaxillary (submandibular) lymph glands. This will explain the development of a pre-auricular or submaxillary adenitis so frequently seen in these regions, associated with extensive furunculosis and abscess formation of the eyelids.

In a review of the veins of the nasal cavities we find that in many instances there is a definite relationship with the veins of the eyelids. The veins of the nasal cavity form a plexus under the mucous membrane. This plexus is drained by the veins which accompany the sphenopalatine artery and empty into the ophthalmic veins, some passing through the foramen in the nasal bone and nasal process of the superior maxilla and emptying into the facial veins.

Wirtz in 1919 in a discussion of the anatomic relationship of the teeth and the eye and its adnexa, attributed the propagation of dental infection to "the eye and its adnexa principally by way of the veins, especially the venous plexus of both organs which partly have the same out-

flow: viz., the pterygoid plexus and the anterior facial veins. This with the ophthalmic facial veins connects the venous plexus of the orbit with the numerous outlets of the teeth."

Thus from the above venous study of the eyelids and the nasal cavities together with Wirtz's theory on dental infection propagation by the venous route, we may be able to show some indirect relationship at least, to indicate a possible dissemination of infection from the sinuses to the eyelids and the development of repeated crops of styes that often follow on the wake of acute attacks of sinusitis.

From repeated personal observations, I am firmly convinced that styes and furunculosis are associated with and the results of abnormal carbohydrate metabolism. In many instances this is equivalent to a true diabetes mellitus, while in others it is simply a lowered sugar tolerance with the exhibition of styes and furuncles as symptoms.

The subject of carbohydrate metabolism is a big and fascinating subject, belonging entirely to the field of internal medicine, but I cannot help but mention that it is a well established fact that the carbohydrate tolerance of an individual is much diminished by even a slight infection such as an ordinary nasal cold, and the effect of more serious bacterial invasions may be correspondingly greater.

If the above is true and there is scientific evidence for this assertion, then we have another possible explanation for the oft-repeated stye following acute upper respiratory infections.

The complications of styes are in the main few, however severe secondary conditions do occasionally occur, as in Dr. John Green, Jr.'s case of orbital cellulitis following hordeolum. Green reported several other similar cases to his, in his paper. Eagleton in his work on Cavernous Sinus Thrombophlebitis reports a case of fulminating cavernous sinus thrombophlebitis from a stye.

The successful treatment of styes depends upon the removal of the primary cause, an old but wise adage in the practice of medicine. We may discuss treatment under the heads of prophylactic, local and general.

By prophylactic treatment I mean the gentle cleansing of the free margins of the eyelids as well as the entire lid itself, with warm sterile boric acid solutions and the subsequent application of warm sterile boric acid compresses at intervals to an eyelid that does not feel quite normal. Such treatment together with the use of a mild zinc-adrenalin chloride collyrium may avert the development of a stye. Woods recommends the use of red iodide of mercury gr. vii to olive oil z. $\frac{1}{4}$ to be applied several times daily to an incipient stye as abortive treatment. Woods also recommends zinc sulphate gr. 16 to Zi one dram to be applied to the lid margin by a clean finger. He states this is excellent abortive treatment.

Where abortive treatment fails it is probably best to encourage suppuration by frequent hot packs of sterile boric acid solution. The skin should be protected by bland ointments or oil. The use of various types of household poultices should be condemned and discouraged as they tend to spread the infection and macerate the epithelial layer of the skin. When pus becomes evident, free drainage should be obtained by a free horizontal incision. Squeezing and attempts at forceful expression of the pus should be discouraged on account of devitalizing normal structures with the possible spread of the infection.

Foreign literature, especially German, contains numerous references to the treatment of hordeolum, chalazion and furuncles by many types of local treatment. Snoy treats styes with Wassermann's histoplast. This is a plaster-like substance which is applied to the sty or furuncle. It remains from one to three days. He claims for this treatment: (1) Immediate subsidence of pain, (2) No inconvenience to the patient, who continues with his usual duties.

Marcuse has a publication on the conservative treatment of furunculosis and styes with pancreatic salve, which he states is very reliable, efficacious, and is an easily applied remedy.

Tinssner recommends the use of yellow salve which is yellow oxide of mercury in yellow vaseline.

Bramer advocates the use of analgit, a preparation similar to ichthyol.

Kissmeyer recommends the use of pure ichthyol.

General therapy embodies a large variety of treatments depending on the cause. Some patients respond rapidly to vaccine therapy, either stock or autogenous. My personal experience with vaccines has not been highly satisfactory; however, I do not condemn them, for they have a field of usefulness in certain cases. Non-specific protein therapy in selected cases has a value and often produces a favorable effect.

In those cases with chronic constipation and intestinal disorders, the administration of reliable yeast preparations together with the regulation of the diet to correct the sluggish elimination does much to help clear up these cases. Cases with secondary anemia which is found on making the routine blood counts, mercury and smears, require many fresh vegetables rich in iron, also tonics of iron, phosphorus and cod liver oil. The use of concentrated liver extracts, especially where the copper salts are retained, help these cases of secondary anemia greatly. The use of ultra-violet ray therapy, in these cases of anemia with styes, accomplishes much good. Used locally and generally in many of these cases, it is a valuable adjunct to surgical drainage and distinctly lessens the number of crops. "It is an established fact," says Schiller, "that the ultra-violet ray stimulates the normal defensive power of the individual and

that there is a large amount of bacteriological evidence showing the sterilizing value of the ray."

All patients, especially adults with repeated sty formation, should be most thoroughly examined physically. Complete and careful urinalysis should be made and the blood chemistry of every one of these patients should be investigated. You will be quite surprised too at the number you will find with disturbed carbohydrate metabolism. Favorable results are obtained by instituting balanced diets, in order to correct the overweight so frequently seen in these patients, to eliminate the sugar in those cases presenting glycosuria, and to reduce the high blood sugars. Most of these patients respond to dietetic treatment nicely.

Foreign literature has numerous references to the value of tin preparations as specific in styes and furuncles. I have used one preparation with some gratifying results in about fifty percent of cases.

In conclusion, may I recommend on your part a more thorough investigation of all your cases of styes, to determine the etiology. Wherever the causes are not local, there should be a closer cooperation between the ophthalmologist and the internist, to investigate every case most thoroughly, so that once the cause is determined proper general therapy can be intelligently and scientifically instituted.

DISCUSSION

B. G. LARKIN (Indianapolis): Dr. Ravdin's excellent dissertation on this subject covers the field so thoroughly that there remains very little to be said. When the Secretary asked me to discuss this paper I began to look up references to styes, and it is surprising how little there is in the literature on this subject. The sty is the commonest disease of the eye with which we have to contend, and yet so little has been written that is available on the subject.

I think the diet has a great deal to do with this condition. A great many of the young people nowadays are probably not taking a balanced diet and this manifests itself in styes. In a majority of cases in young girls I insist that the mother see that they have a balanced diet, and emphasize the fact that I think the diet is very important.

In regard to refractive errors, I refract these patients carefully, and if they continue to have styes I refer them to an internist or pediatrician to find the cause, which is usually physical.

As far as vaccines are concerned, a great many people will not consent to their use unless they have a series of styes. Those in whom I have used vaccines have not shown gratifying results. The one point I wish to emphasize is the diet.

C. J. ADAMS, M.D. (Kokomo): I also wish to compliment the author on his very exhaustive treatment of this subject. I have been treating styes for a number of years, with fair success. I have never had any really stubborn cases. One thing I have noticed particularly, and that is that

styes play out in some cases. They may have them over a period of six months, or a year or two, and then apparently they disappear for some reason or other. I remember one girl who, from a refractive standpoint, had a high degree of myopic astigmatism, and when she left off her glasses, even for a few hours, she would develop a styte.

This proposition of general treatment for styes I am not so sure about. The staphylococcus is a localizing bug; he does not extend his efforts to any great extent, but tends to localize. It looks to me as though styes were a local proposition more or less. As a rule I have found that proper refraction and cleansing the eye at night, rubbing in a little zinc oxide, has given me pretty good success.

A. E. BULSON, M.D. (Fort Wayne): I have not had much trouble with persistent styes. I use the same treatment for styes as for phlyctenular keratitis, that is, clean out the bowels with a purge and follow up with limited diet. In children I am in favor of calomel. I give calomel with a great deal of satisfaction—not in small doses of one-twentieth of a grain, but two or three grains at once, and I have never seen any ill effects. Then I put the patient on orange juice, milk and cod liver oil, and insist that nothing else shall be added to the diet for a week or ten days when toast or cereals may be added. At the same time I correct errors of refraction, which I think is important. I seldom have a case that will not clear up if they follow that regime. I am firmly convinced that dietary regulation is four-fifths of the battle, and I know it is in phlyctenular keratitis, which is also due to toxemia. I am more and more convinced that those cases of phlyctenular keratitis that are not due to mechanical irritants or to errors of refraction, are a precursor of styes, and that all of them will clear up if they cut out the sweets and pastries and things of that kind. (Let them have all the orange juice and fresh fruit they want. I also give cod liver oil and milk, and that sort of nourishment will build up the child and at the same time you will be surprised how its disposition will change; it will become docile, the styes will disappear, and you have a healthy patient.)

C. H. McCASKEY (Indianapolis): I have noticed in the case of my own daughter that every time she would get a cold, a few days later she would develop styes. Very often she would get cold while in swimming in summer and have a nasal discharge, and immediately she would have a crop of styes. When we got the cold cleared up the styes would disappear. That made me think that in her particular case it was probably due to nasal infection, but whether she had a bad metabolism or a wrong diet, I do not know. She always has been of normal weight and has been healthy otherwise.

A. E. BULSON, M.D.: The very diet that will produce styes will also produce acute coryza in children as well as adults. I think it as necessary

to regulate the diet as to give local treatment. Those that have repeated coryza and sinus trouble, regulate the diet and see what will happen. You will be surprised.

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STATE MEDICINE OR WHAT?*

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ANDERSON

The problems of medical economics always have been of the greatest interest to me, and should be of some interest to every practitioner. State medicine has been casting its shadows on the horizon for a long time, and as I grow older its shadow has grown greater. The care of the ill and injured of a community always has been unsatisfactory inasmuch as only two classes are assured of all that they may require. The wealthy can have the best of service because they can afford to pay for it. The poor are given equally as good care in clinics which have been established for the indigent class, but these clinics of late have been monopolized by many who could and should pay a fair fee for what they receive.

In an attempt to solve some of these problems many organizations have tried to make investigations and recommendations, but most of the investigations have amounted to nothing. Several foundations have attempted welfare work and spent money lavishly in so-called health centers which have served only to antagonize the local medical profession. One of the outstanding examples of this is the so-called Milbank demonstration in Cattaraugus county, New York, where for five years a hundred thousand dollars a year has been expended and has succeeded only in having its methods condemned by the local and state medical organizations. At the last meeting of the New York State Medical Society the house of delegates passed a resolution sustaining the opposition of the local medical society "because the Milbank Foundation has not governed itself either in spirit or practice by the principles laid down by the society for the conduct of its members in their relation to public health work conducted by lay organizations."

*Presented before the Madison County Medical Society, April 16, 1929.

We have altogether too many welfare workers as parasites to the health work of our state and nation. We have altogether too many of our own profession using these health demonstrations as a means of advertising themselves rather than for the good they can do in their work. We are facing another problem in the self aggrandizement of certain individuals in connection with some of our state hospitals whose enthusiasm for quantities of work causes them to overstep the bounds of propriety and utilize questionable methods to bring all who can come to avail themselves of what their missionaries term "superior service."

How to provide competent medical, hospital and laboratory service for the great middle class is becoming a graver problem every day, because the inducements for purchasing luxuries are so alluring that few are able to resist the blandishments of the present-day salesman. A recent report of the Automobile Trade Association showed that ninety-three percent of all the cars are sold on installments. Present-day advertisements are made to keep and cause a constant discontent with everything one may have unless it is the latest thing on the market. One of the late trade promotion books contained a sentence, as given out by the sales manager of a certain concern, which said, "The purpose of advertising is to create discontent and to break down sales resistance." Under these circumstances the present-day middle class family is looked down upon by the neighbors unless that family possesses a car, a radio, electric washing and ironing machines, and many other luxuries which in reality the family cannot afford. The family does afford them, however, and can afford them so long as the entire family can contribute to the payments, and as long as work is available the family can continue to keep up the payments. But this class of people have no surplus laid by for emergencies, and two weeks layoff would put eighty-five percent of the population on the verge of making an assignment.

Economists state that it requires four percent of the family income to provide the minimum of competent medical care in a family, and including dentistry it will take five percent, and this will not include any serious emergencies. If the bread winner in the family is incapacitated then an operation and its expenses in a hospital will require an amount that the majority of people cannot afford. Their expenditures for luxuries and unnecessary diversions, and the so-called high standard of living, leaves them no surplus to provide for emergencies such as sickness. These emergency expenses could be cared for easily if the gasoline bills were reduced and one or two picture shows passed up each week, but these and the weekly trips of the women to the beauty parlors now seem a necessity that cannot be avoided. One of my young patients needed med-

ical care for a condition which lays her up for two or three days each month, but she said she could not afford the necessary treatments. When I came to inquire into her expenses I found that she patronized a beauty parlor very frequently, and seemed proud of the fact that she had not cut her own finger nails for years, or washed her own hair, and her weekly trip to the manicure and hairdresser cost her an average of two dollars. Such people are not to be considered as worthy of our charity but are no worse than some men who owe us old doctor bills and yet spend as much as a dollar a day for their cigars. However, these people occasionally get injured in accidents or have some acute surgical emergency and are rushed to the hospital irrespective of whether they have a dime to pay us or their hospital bills, and we take care of them and trust to their honesty to repay us later for our services. In far too many cases we and the hospitals get nothing. These same people expect to have a private room, and often a special nurse. It is not uncommon for them to pay for one week's hospital bill and never pay anything more. They do get together some way the money for the nurse if she collects each week, but she finds an excuse to leave when the money is not forthcoming. One of my patients who had a diabetic gangrene and required three operations in as many months secured enough to pay her special nurse for ten weeks, but paid me only a small part of my fee.

Our fees, of course, should bear some relation to the family income, and one of my friends makes his fees for a major operation equivalent to the income of the individual for one month. Obstetric fees should be graduated accordingly, charging the equivalent of a week's income as a minimum fee for a normal case. However, charging and collecting are two different things, and we have been far too lenient in our business affairs in the past to change the habits of the people in thinking they can pay the physician when they get the money or have it to spare, and some never have it to spare.

In Chicago there is an organization that provides for a stated fee payable monthly as insurance for competent medical, surgical and hospital care to about 18,000 people. It was started as an experiment, and not only has proven successful according to a recent report in the *Jour. of the A. M. A.*, but has returned a profit to the founders. I am not conversant with the details of the enterprise, but understand that each family pays monthly a fee which gives them their choice from a number of physicians, and these physicians give their services for a salary based according to the amount of work they are called upon to do. The cost is spread over so many families that it equalizes the income and outgo, and has paid fair fees to the physicians who are on the call list. If we could reduce our own overhead and avoid duplication of equipment, and receive pay from all

who now do not pay us, we could afford to do our work for probably two-thirds of what we now have to charge in order to make more than an ordinary living, provide for the education of our children, and leave as much of an estate as we would have had had we invested the money that we spent on our education in some safe bond and let it compound its interest for twenty-five years, which is the average time a man practices his profession successfully.

Medicine is an art as well as a science, and if we read Cabot we will have to admit that it is more of an art than a science. But considering the advantages which present-day laboratory methods have given us, we can do no less than take off our hats to the past generation of physicians who utilized their abilities so wonderfully in meeting emergencies, and caring for difficult medical problems empirically and often as successfully as some of the newer generation do with the aid and assistance of complete laboratory and hospital equipment.

In Indiana we have several medical problems no different perhaps from those in other states. Now that medical education has been taken over by the various states as part of the university educational program, it is necessary to provide a proper amount of clinical material for the students to receive instruction from, and this requires state hospitals. In their place these state hospitals serve a double purpose of as much advantage to the population as to the cause of medical education. These hospitals should be open to the worthy poor as a matter of state charity and they should be the outlet for the profession over the state to send their unusual cases for study and observation when such cases cannot bear a proper charge for all the necessary hospital, laboratory and other charges that might accrue from the proper care of the patient. The fact of the matter is that there are many families of moderate income who are more worthy of receiving state benevolence than some of the paupers that are costing the state an average of five hundred dollars a year during the whole period of their lifetime. However, when wholesale methods are taken to sell a state endowed institution to the laymen of the state at the expense of the local profession, soliciting patients through well-meaning but ignorant busybodies, sending out bulletins with *Perruna* type advertisements of the wonderful cures made in these hospitals, sending out nurses who ignore the local profession and get up welfare meetings, addressing parent-teacher associations, and all who can be dragged into hearing them, emphasize the superior service given in Indianapolis, then the state institutions are doing the local profession a rank injustice. Local hospitals and local specialists should have the benefit of the experience that comes from local clientage, providing the hospital, and the local profession can care for the patients as well as they can be cared

for in a state institution. But several factors have been working to make the patronage of the state hospitals different from what they should be.

Some physicians have been sending to the state hospitals patients who could pay a moderate fee to the family physician or specialist, and get them in by certifying that they are indigent. Sometimes this is done in order to favor a family whose possible prestige is desired. I have made a number of personal investigations of cases, and find that in most every community there is some physician who feels that in saving his families a hospital bill by sending them to a state institution he is more likely to hold the family for their other work and get his pay from them. Others send their patients to state hospitals because of a grudge against local associates. Others have charged a fee to these patients for taking them to a state hospital and for visits to the patient while there.

The fact is that no patient can be sent to a state hospital without the certification of some physician, and so we cannot place the blame any place but in the county where the case came from. There are political aspects to the situation also that must be considered, in that the broadcast methods of the outpatient departments have given the people an idea that anyone can go to the state hospitals and get free medical or surgical service if he has a little political pull, and so pressure is brought upon political friends who get a physician to make out the papers, or failing in this, have the court appoint a physician, which he can do, and on this report the judge commits the patient to the state hospital.

Another factor working to our disadvantage is the fact that township trustees have found that they can save their township funds for other purposes by having cases sent to the state hospitals, and have the county pay for the care of the cases instead of the township. In Madison county last year eight tonsil cases were sent to Riley Hospital from Elwood at an expense of \$180.88. Elwood has a good hospital and one or two men doing tonsil work, and there is no reason for the entire county being assessed for this charge when the township is amply able to pay for the hospitalization of these cases and local men are able and willing to do the work gratuitously if the cases are really entitled to charity. Not only do the local institutions need the money, but sending these cases to Indianapolis requires a longer stay in the hospital than if they were cared for locally. These eight Elwood cases averaged seven days of hospitalization, and for this the county had to pay \$3.30 per day per patient. Rarely does a tonsil case stay over night in Anderson at St. John's Hospital and two men are doing all this kind of work in their own offices. Instead of the township trustee paying a fair operating room fee and twenty-four hour service charge to the local hospital, or \$10.00 for

each case, or a total of \$80.00, the county taxpayers have paid \$180.88.

Madison County has contributed nearly \$19,000 to the state hospitals in the last three years. Fifty-one patients in Riley Hospital in 1928 cost the county \$2,179.31. One empyema case cost the county \$378.60, a fractured femur \$185.40, and an epileptic case \$132.25. Fourteen patients were sent from Anderson, costing \$646.55. They were diagnosed as follows: Spine injury, spina bifida, nervousness, epilepsy, club foot, arthritis, hare lip and cleft palate, brain tumor, hypothyroid, two tonsil cases, mental deficiency, renal calculi, and chronic pyelitis. All of these cases probably are worthy and suitable cases for study and treatment that can be given more satisfactorily in the Riley Hospital than locally, excepting the two tonsil cases. A case typical of the present situation is that of the child in a family for whom I have furnished service for nearly all the time I have been in practice. A farmer with eleven children, who has been good pay whenever he had anything to pay with, and who never called a physician in ordinary sickness, moved to town after failing to make ends meet on his farm. He got a job and was able to send his younger children to school better than when he lived in the country. Recently, according to the statement of the mother, the school nurse came to see her and informed her that their eight-year-old girl was doing indifferent work when the year before she had been one of the best in her class. The nurse also said that the girl seemed nervous and dizzy, walked at times rather funny, and acted as if she had some spine trouble. The nurse also said that if the girl had spinal trouble she must be sent to Indianapolis for an examination, and that if the family couldn't take the girl down to Riley Hospital she (the nurse) would take her there. The mother said the order was given as if the same rule applied from the school nurse as the truant officer, and so she had permitted the girl to be taken to the Riley Hospital for an examination. All that the mother found out was that the hospital examiners had said the girl would have to be brought back and left at the hospital for a period of observation. The mother had come in to see me as to whether she had to take the child to the hospital whether desired by the parents or not, and to have me make an examination of the girl to see what was wrong. I told her that no child had to go to any state hospital unless the parent or guardian sent it there.

On getting the history of the child I found that she had had no serious illness of any kind, and had never been and was not sick enough to make them think she ought to be examined by a physician. The mother said, however, that a year or two ago the girl seemed a bit dizzy when she got up suddenly and started to run and play, and this was the thing the teacher had noticed

recently. Also that she had fallen once or twice after she got up from her desk at school. On physical examination I found a loss of the patellar reflex, and when I tested her coordination I found that she was unable to stand without keeping her eyes open. As soon as she closed them she began to sway and would fall if not caught. If she closed her eyes and started to walk she would fall to one side after taking two steps. This showed an involvement of the cerebellar and lateral tracts in the spinal cord, and indicative of a probable Frederich's ataxia, one of the rarest nerve lesions we get to see in children. Ordinarily, however, this is an hereditary condition, and on further inquiry I found that the mother had a brother who had to quit school in the fourth grade but lived to be nineteen, and that before he died he was completely helpless for four years. She said they thought the boy had fallen and hurt himself when he was in the second grade in school but they were not certain, as he just seemed weak in the legs and unsteady in his walk for a year before he had to quit school. She also said that for a good part of the last year in school he had to be led to the building as he seemed unable to walk by himself but got along pretty well when someone walked beside him. My findings in the girl's case, coupled with this history, made it reasonably certain that I had a typical case of Frederich's hereditary ataxia. I have advised the mother that it would be to the child's best interest and their own satisfaction to send the girl to Riley, where she can be under observation for a short time, as the case is hopeless from the standpoint of treatment or recovery if my diagnosis is confirmed. This little patient is one of a class that should be sent to Riley for use in the clinic, as no other case has been seen by me outside of one or two exhibited in the big clinics in Chicago.

When the matter of the issuance of the Riley Hospital Bulletins from the social service secretary in Bloomington was taken up with Dr. B. D. Myers, he said he had never seen a bulletin and knew nothing of the matter. However, the bulletins still are being issued and are being sent broadcast over the state to every alumnus telling each of the superior service and great miracles being wrought. This should be stopped. If they have any bulletins to issue let them be sent to the physicians over the state and solicit proper cases for the hospital and clinic that are useful in teaching or require special care and treatment that cannot be given by the local profession, but every case sent to the state hospitals must be sent there by some local physician, so that the fault of having the taxpayers imposed upon, giving free service to patients able to pay, and sending patients unnecessarily to the hospitals at an unjustifiable expense should be a charge against some local doctor.

Medical care and treatment is being centralized

more and more and will continue to do so. Present educational opportunities for entering medicine are so uncertain and so expensive that a poor fellow has little chance, as working his way through school and keeping up his studies is impossible at present, and in some schools you cannot enter the premedic course unless you have the means to complete the work through medicine without devoting any time to outside means of securing financial assistance. We are educating a higher class of scientific men, but at the expense of the type of individual who expects to enter general practice. These graduates now have expended so much time and money in their education that they must go where they can be assured of an ample financial return on their investment, and their training has been such that they expect to use and must have ample hospital and laboratory service to make their work satisfactory to themselves. Madison County has less than half the number of licensed physicians it had in 1900. One community that supported fourteen physicians now has six, the youngest over fifty-five and the rest over sixty years of age. Another that supported eight physicians now has two and one is over seventy years of age.

The better class of our patients are going to Rochester, Cleveland, and other big centers, and we are and have educated our patients to go there because we have not been able to give them the attention they demand. The charges in some of these cases are beyond the reach of the average family. A heart case recently paid seventy-five dollars for four days' hospital and laboratory care, including electrocardiogram, metabolism, blood chemistry, x-ray and routine examination. Of this amount fifty-five dollars was for laboratory service.

Public opinion, fostered by our foolish legislation in pensioning most everybody, widows, orphans, the aged, and the blind, and other altruistic efforts on the part of grafters on the general public, makes the average person think it useless to do otherwise than expect "the Lord to provide." The individual who gets a pension of thirty dollars a month is better off than a man who has worked hard and saved an estate of \$15,000, and if we are going to be taxed to support the paupers in luxury why not provide something for the middleman who is carrying this burden? The first thing he will ask for is state aid when he is disabled by illness or accident. In fact he is more entitled to it than anyone else, and these state hospitals are being pushed through to be open to everyone who asks to be admitted, paying a nominal fee if he can. The new Cornell Medical Center in New York is planning for an eighteen-million-dollar investment in public health. There the work will be localized and physicians can do work in a satisfactory environment, without any overhead of office or equipment expense, regular hours of work, and limiting their work to the one

line in which they are interested. The younger physicians are seeking these appointments, with salaries better even than the average income in private practice, and opportunities for salaries far greater than the average. In the Ford Hospital these salaries run from \$2,500 to \$30,000. In comparison to this, one of my friends who is in his specialty second to but a few men, told me his clinic collected \$72,000 last year, but out of this he saved less than \$10,000, as he required a staff of four physician assistants, a technician, nurse, bookkeeper, secretary, office girl for phone and to make appointments, and chauffeur, on his salary list, besides an expensive office to keep up. He said the most he got out of his profession was the pleasure of doing the work he liked in a manner that gave him the best results, and greater satisfaction in eliminating routine and detail. Fortunately he is financially independent of his professional fees.

Every one of us feels at times that he would like to change his job and be a good union plumber or plasterer and pull down from ten to twenty dollars a day for an eight-hour day, with Saturday afternoon and Sundays off. Also no overhead in education, and a fifty-dollar equipment. However, most of us are practicing medicine and surgery because we love the work and take pleasure in being a worth-while asset to the community. We also have taken pride in the fact that in our profession we can be as independent as we wish to be without worrying about a timekeeper and the necessity of punching a time clock.

Changing conditions from agricultural to industrial economic necessities have changed everything, including our viewpoint concerning morals, women's clothes, housing and feeding problems, and so will the practice of medicine also be changed so that the great middle class may have all that the rich and the poor have been receiving in the past. If this means state medical centers, county and municipal units, with full-time specialists, and all home practice cared for as an out-patient department, so will it be. In my opinion we are rapidly approaching a time when these things will be a reality even though some of us may deplore the fact. Until that time, however, every one of us must carry the responsibility of doing our work in such a manner that we can feel and know that we are giving all that we are paid to give, and take much of our reward in the knowledge that we have some patients whose appreciation is such as to spur us on to be worthy of their confidence in us.

SPECIAL ARTICLE

NOTES ON THE PORTLAND MEETING

TOM HENDRICKS

Executive Secretary

Indiana was well represented and received its share of honors at the annual meeting of the

American Medical Association at Portland, Oregon, last month. Physicians from the Hoosier state played a large part in the business, scientific and clinical sessions during the meeting week, and all who took the trip west, whether they went to participate in the activities of the national body or merely to take in the scenery, were well repaid.

As for the individual honors, our own editor, Dr. Albert E. Bulson, of Fort Wayne, was elected vice-speaker of the House of Delegates of the American Medical Association for the coming year, and Mrs. Frank W. Cregor, of Indianapolis, was elected vice-president of the Women's Auxiliary of the American Medical Association.

Indiana was represented in the House of Delegates by Drs. Albert E. Bulson, Fort Wayne; Garland D. Scott, Sullivan; Harry Elliott, Brazil; David Ross and Frank W. Cregor, Indianapolis, who acted as delegate from the dermatological section. In addition to his duties as delegate, Dr. Cregor also was a member of the judicial council of the Association which held several sessions during the meeting.

Dr. Bulson acted as chairman of the committee on the reports of officers, while Dr. Ross served as a member of the committee on sections and section work. Dr. Alois B. Graham, of Indianapolis, chairman of the section on gastro-enterology and proctology, made the principal address before his section.

Several Indiana men had places on the scientific program. A. S. Giordano, South Bend, read a paper on "The Early Diagnosis of Undulant Fever" before the section on pathology and physiology. "Primary Carcinoma" was the title of a paper read by Dr. P. E. McCown, Indianapolis, before the section on urology.

One of the features of the scientific session was the demonstration work that is being done by selected physicians throughout the country in connection with the fracture exhibit. Dr. D. R. Ulmer, Terre Haute, and Dr. G. D. Scott, Sullivan, were members of the demonstrating staff.

One of the largest and most interesting scientific exhibits was that conducted by the Central State Hospital of Indiana, under the direction of Dr. Max A. Bahr and Dr. U. L. Bruetsch, Indianapolis, in connection with the demonstration of the American social hygiene committee. This exhibit stressed the original research work which has been done by Dr. Bahr and Dr. Bruetsch in the malarial treatment of paresis. The exhibit was given over to charts, motion picture films and specimens showing the methods and results of treatment of malaria therapy. Dr. Bahr and Dr. Bruetsch received many compliments upon their

exhibit and were asked to come to Rochester to give a special demonstration at the Mayo Clinic.

A big time was enjoyed by the members of the Indiana-Ohio convention special party who left Chicago June 27 and stopped over for short visits at Omaha, Denver, Lookout Mountain, Boise, and Hood River and Mount Hood, Oregon, and spent five days in Yellowstone National Park. The party, made up largely of physicians from the two states, their wives and families, numbered 115. Those making up the Indiana party were: Dr. and Mrs. A. B. Graham, the Misses Aimee and Lois Graham, Dr. David Ross and Dr. Elzie Stewart, Indianapolis; Dr. and Mrs. D. R. Ulmer, Terre Haute; Dr. and Mrs. L. H. Eshleman, Marion; Dr. and Mrs. J. E. Keeling, Waldron; Dr. and Mrs. F. A. Loop, Lafayette; Miss Edna Stewart, Minneapolis, Minn.; Dr. and Mrs. P. M. Sutherland, Angola; Dr. and Mrs. Carl Boardman and Marylone Boardman, Gary; Dr. and Mrs. Chas. M. Kennedy and Dora Lee Kennedy, Camden; Mrs. D. C. Stimson, Owensboro, Ky.;



A few of the members of the Indiana-Ohio party.

Dr. and Mrs. Perry Woolery, Bedford; Dr. Jas. N. Jenne, Burlington, Vermont; and Mr. and Mrs. Thomas A. Hendricks, Indianapolis.

Other physicians who registered from Indiana were: Drs. Burton W. Egan, Logansport; Lawrence F. Fisher, South Bend; E. T. Gaddy, Indianapolis; William L. Green, Pekin; David W. Robertson, Deputy; R. L. Sensenich, South Bend; Morrell Simpson, Bedford; P. N. Sutherland, Angola; Harry A. VanOsdol, Indianapolis; Chas. E. Caylor, Bluffton; J. F. Gillespie, Greencastle; Alva M. Kirkpatrick, Columbus; Ernest L. Mattox, Terre Haute; William J. Molloy, Muncie; W. R. Morrison, Kokomo; Melvin D. Price, Indianapolis; B. W. Rhamy, Fort Wayne; Frank E. Wiedemann, Terre Haute; Werner W. Duemling, Fort Wayne; Homer G. Hamer, Indianapolis; Arvine E. Mazingo, Indianapolis, and A. G. Shauck, Arlington.

In addition to those who attended the meeting of the American Medical Association, a number of physicians attended the meeting of the American Urological Association which was held at Seattle, Washington. Dr. Homer Hamer, of Indianapolis, president of the American Urological Association, presided at the Seattle meeting.

Dr. J. N. Jenne, who attached himself to the Indiana group at the start of the trip, is the dean and professor of clinical medicine at the University of Vermont. Dr. Jenne was adopted by the Hoosiers from the start and helped make the trip enjoyable for everybody.

In addition to the Indiana physicians, a number of Indiana firms had displays in the commercial exhibit which occupied a large part of the well arranged public auditorium. Those represented were: W. D. Allison Company, Eli Lilly and Company, Indianapolis; Frank S. Betz Company, Hammond; DePuy Manufacturing Company and Zimmer Manufacturing Company, Warsaw; Mead Johnson and Company, Evansville; Juvenile Wood Products, Inc., Fort Wayne.

RHEUMATIC FEVER

Homer F. Swift, New York (*Journal A. M. A.*, June 22, 1929), discusses the meaning and scope of the term rheumatic fever, the different types of infection, the visceral manifestations of rheumatic fever, the histologic characteristics of the disease, the nature of rheumatic valvulitis, the factors in etiology, the etiologic role of streptococci and the allergic theory. He stresses the fact that the so-called allergic theory does not establish unequivocally the etiologic role of streptococci in rheumatic fever but only furnishes the best explanation of how the different strains could all induce a similar clinical and microscopic picture. It also furnishes a hypothesis for continued investigation of the disease, from which further advances may be anticipated. The observation that intravenous inoculation of rabbits altered the hypersensitiveness to a hyposensitive or immune state has led to the treatment of patients with intravenous injections of relatively small doses of streptococcus vaccines or nucleoproteins; and following properly regulated doses has been observed a constantly diminishing febrile response and in several cases a decreasing cutaneous reactivity after the treatments. In many of the patients there have been a corresponding improvement in the general condition, but whether this was due to the treatments or was a natural evolution of their infection it is difficult to affirm. The evaluation of therapeutic measures in patients with rheumatic fever is one of the most difficult problems in medicine. This is due to the fact that in most instances there is a tendency to recovery, temporarily, at least, and it is difficult in any single case to judge when this will occur or at what rate it will proceed. Because of the marked tendency to relapses in the acute forms of the infection and the liability to recurrences in patients who have once had the disease, it is probable that if in a group of individuals any form of treatment eliminated these relapses and recurrences as compared with a like number of untreated controls, it might be stated with a fair degree of certainty that the treatments had been of value. In the meantime, investigation must proceed with certain hypotheses based on as exact experimental work in animals as can be devised. Up to the present the methods at our disposal of decreasing the hypersensitiveness of infection are (1) stopping the production of new foci of infection; (2) elimination of foci already present, and (3) intravenous desensitization or immunization with suitable antigenic substances. The eradication of infected tonsils and teeth has been a standard of treatment. While apparently brilliant results follow this treatment in certain cases, in others they are disappointing, perhaps because of the impossibility of eliminating all such foci. It appears, then, that an important problem is to devise some method of building up the immunity so that the

Before the train was well under way everyone knew everybody else and the entire group was one big family and remained so until the arrival at Portland except for one brief afternoon when Dr. and Mrs. Keeling and Dr. and Mrs. Eshleman became so enraptured with the Columbia River Highway scenery that the special train pulled out from the Hood River station without them. A big welcome was staged for the wanderers when they rejoined the Hoosier-Buckeye party in Portland.

After the meeting many of the party came back on the special train through Canada, visiting Seattle, Tacoma, Mount Rainier, Vancouver. Others left the party, visiting California before returning.

liability to renewed infection will be lessened, or if new infection occurs the reactivity of the tissue will approximate that of immunity without hypersensitiveness.

INCIDENCE OF FOOT RINGWORM AMONG COLLEGE STUDENTS

A careful survey has been made by Robert T. Legge, Lee Bonar, Berkeley, California, and H. J. Templeton, Oakland, California (*Journal A. M. A.*, July 20, 1929), among the lower classmen at the University of California at Berkeley as part of an intensive piece of research on ringworm of the feet. It was found that the incidence to ringworm of the feet among 3,100 freshmen entrants was 53.3 percent in men and 15.3 percent among women, showing that the disease was already common among high school and preparatory school students. At the terminal period of the spring semester, another survey was made of 1,000 men and 997 women who had been engaged for two semesters in physical education and who had entree to the showers, swimming pools and apparatus. At the men's and women's gymnasiums it was determined that 78.6 percent of the men students and 17.3 percent of the women students had clinical manifestations of ringworm of the feet. Among the men, 9.3 percent had evidence of crural ringworm. This form of groin ringworm may be associated with the foot types, and as a precaution persons should never use a towel on the body that has been used first in drying the feet and should be careful in the wearing of sanitary gymnasium clothing. On the campus of the University of California the women students occupy the new Hearst Gymnasium, equipped with every known sanitary device. The women students and attendants are obliged to provide and wear rubber bathing shoes, and under no circumstances are they permitted to walk with bare feet on the floors of showers or runways leading to the swimming pools or gymnasiums. On the other hand, the men occupy an antiquated gymnasium, where, on account of the lack or nonuse of bathing shoes and inferior sanitary facilities, the students constantly walk in their bare feet and become infected. The authors believe that this single factor has been an important one in controlling the infection, the incidence increasing among the women only two percent, while among the men, on account of the lack of these precautions, it rose 25.3 percent in the space of one year. Another reason why women students have less ringworm of the feet is that their habits are cleaner and they observe a much higher type of personal hygiene; they perspire less than men and wear lighter low shoes, which are better ventilated and changed oftener. It should be the care of every person never to permit the bare feet to touch the floor in any gymnasium, athletic club, shower bath or runway to swimming pools.

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EDITORIALS

TRICHINOSIS

The government has issued a bulletin on human trichinosis and says that the disease is found in the middle states, particularly where there are Germans and Italians who have retained their native fondness for raw and imperfectly cooked pork and pork products. An occasional case occurs in Indiana and it is entirely probable that some cases are not diagnosed.

The disease frequently is confused with other febrile diseases, especially typhoid fever. It is accompanied by gastrointestinal symptoms which may appear within a few hours following the eating of pork containing live trichinæ, or may be delayed for a day or longer. There may be nausea, vomiting, diarrhea and severe abdominal pains, or these symptoms may be entirely lacking. There usually is a general dullness, with a feeling of weakness, twitching of the muscles, and sensations of tension and pain in the muscles, especially the flexors of the limbs. Toward the close of this period, œdema of the face and eyelids appears and is likely to disappear entirely and reappear a few weeks later.

In the second stage of the disease, appearing nine or ten days after trichinous meat is eaten, there is severe muscular pain, especially of the flexors, and the muscles become tense, hard and swollen. The eyeballs become inflamed or may show small hemorrhages. There is difficulty in chewing and swallowing as the result of the invasion by the larvæ of the muscles involved in these processes. Respiratory difficulties are occasioned by invasion of the intercostal muscles in the chest wall, and there may be even dyspnea and asthmatic attacks. Profuse sweating is very common and may last throughout the course of the disease.

In the final stage of the disease the legs, forearms, abdominal wall and face become swollen. The patient becomes anemic and various skin eruptions appear. Pneumonia is likely to set in during this stage. Fever usually occurs early in the disease and reaches its height about ten days after the onset. It may persist or may show daily remissions throughout the second period. Death occurs most commonly from the fourth to

the sixth week and rarely occurs before the second week or after the seventh week. These symptoms are by no means constant and in light cases the symptoms may be so insignificant as to pass by without any special notice. Even typical cases may be diagnosed as typhoid fever, and undoubtedly many cases, especially light cases, are never correctly or accurately diagnosed.

The treatment is entirely symptomatic in view of the fact that the recognition of the disease generally occurs too late to effect expulsion of the worms from the intestine. The prevention of trichinosis is a personal responsibility and involves the thorough cooking of all pork. Pork products of kinds customarily eaten without cooking are also dangerous unless it is definitely known that such products were prepared in a plant operating under federal meat inspection or equally through state or local supervision.

STARVATION AS A THERAPY

Fasting as a cure of diseases other than those due to overeating runs back to antiquity. It is frequently bound up with religious practices and prayer under the assumption that abstinence from food "purifies" the body and renders it less susceptible to the influences of evil and more susceptible to the influences of good. When fasting is united with prayer one cannot know whether the favorable outcome is due to the fasting or to the prayer. In a recent address before the medical Society of London, Dr. Edmund Spriggs reviews the history of fasting as a therapy in earlier times, the modern indications for fasting in disease, and the dangers involved in the therapy of fasting. The physical, chemical and mental changes involved in prolonged starvation have been subjected to excellent studies, both on man and on animals in recent years. Organs lose weight, not uniformly, and some, such as the heart and brain, lose at a much slower rate than organs such as the pancreas, liver and spleen, and the skeletal muscles. The basal metabolic rate and the blood pressure are gradually lowered during a prolonged fast. Complete starvation, particularly in an obese person, leads to a mild degree of acidosis. The changes in the blood during starvation are not great. There is a tendency to a slight increase of the nonprotein nitrogen and slight but not consistent or persistent decrease in the blood sugar. A healthy, well nourished man may fast for from thirty to forty days without demonstrable permanent injury, and dogs may fast without apparent injury for a much longer time. All this, of course, is under conditions when the individual receives a liberal allowance of water. After the rapid loss of weight during the first few days of fasting, an adult person on complete starvation may lose weight at the rate of about half a pound a day when no excessive physical work is being done. Despite the complete absence of food

in the alimentary canal for from thirty to forty or more days, the alimentary canal still harbors at the end the flora common for this organ. Fasting for the purpose of sterilization of the alimentary canal is a failure. Complete starvation is not painful. The essential subjective symptoms are fatigue, and the predominance in consciousness of thought of food and eating. The sex urge is decreased. Dr. Spriggs refers to the wartime undernutrition experience of central Europe. Good clinical studies of these conditions have been reported. At no time, of course, was there complete starvation in Germany or Austria. There was rather prolonged undernutrition and probably, in some cases, there were qualitative deficiencies in the diet, accompanied by unusual mental stress and anxiety, worry and fear. Under this restricted food intake in central Europe cases of diabetes, gout and obesity were greatly improved or decreased in number, while nervous disorders increased, as did tuberculosis and anemia. Patients with myxedema appeared to do badly. Chronic diarrheas and digestive disorders were increased, but this may have been due to the abnormal character of the available food rather than to the partial starvation.

Dr. Spriggs outlines the results of the clinical experience with starvation in local diseases of the alimentary canal, in epilepsy, in obesity, in diabetes, and in diseases of the circulation. He concludes that complete fasting is beneficial in appendicitis, peritonitis and ulcers, largely on the basis of the rest of the digestive organs afforded by the absence of food. The reasons assigned for the apparent benefits of fasting in alimentary canal disorders do not seem convincing, since it is now known that the digestive glands continue to secrete and the alimentary canal continues to exhibit motility all through a prolonged fast. Short complete fasts of from two to three days are said to be valuable in a number of other diseases, such as pneumonia, severe fevers, acute nephritis, chronic uremia, migraine, hyperthyroidism, local infections, phlebitis, rheumatism, rickets, and the vomiting of pregnancy. A number of physicians have reported diminution in the number and intensity of epileptic attacks in patients with idiopathic epilepsy during fasting. This appears to be due, not to the fasting directly, but to the acidosis accompanying the fast. On the resumption of a normal diet the condition of the patient returns to the original state. Dr. Spriggs discusses in greater detail the regimen of fasting in obesity. He recommends not complete abstinence from food but a severe restriction of the calory intake to a level of from 1,000 to 1,300 calories. This restriction should be horizontal rather than vertical, so that the patient obtains some of every ingredient necessary for the body welfare. The calory restriction is usually coupled with a definite increase in physical activity. Dr. Spriggs ap-

pears to have had success with this therapy not only with those obese from excessive eating but even in those obese in consequence of apparently hereditary factors ("endogenous" obesity). The pains and discomforts that some of these patients may exhibit after ten days or two weeks on this low calory intake are said to be quickly relieved by a meal. "Serious symptoms seldom arise during the treatment, and those formerly present generally disappear. Especially striking is the loss of breathlessness." This is ascribed to the removal of fatty tissue among and within the muscle fibers of the heart. Anemia, it is reported, does not develop under this regimen. Dr. Spriggs remarks that obesity is often complicated by other disorders, and as a general rule after treatment by starvation the accompanying disease is improved. Two conditions especially can nearly always be treated in this way: circulatory disorders and mild glycosuria. Patients with high blood pressure benefit almost invariably by reduction in weight, if they are overweight, and in the majority of other patients the blood pressure is also reduced. Dr. Spriggs considers that a temporary short fast is still of value in diabetes, and mild diabetes may be controlled by moderate calory restriction without the use of insulin. He points out that children and cachectic and tuberculous individuals should not be deprived of food for more than a comparatively short period.

Except in cases of obesity clearly due to overeating or underexercise, the fasting therapy is obviously not a cure-all but merely an aid to other remedial measures. The complications that may arise in a prolonged fast and the dangers to life and health that may eventuate in a starving person who is sick to begin with are such that fasting as a therapy is not safe except in the hands of competent physicians.

According to Dr. Spriggs, fasting in an otherwise healthy person decreases resistance to infectious diseases. This may be seriously questioned, at least in cases of complete fasting not extending over longer periods than from fifteen to thirty days. As to the ways in which fasting may improve the general body health, there is little reliable information except for those obviously obese from overeating, in which case it may be a matter of less work for the heart, lessened tendency to fatty infiltration of essential tissues, and lessened strain on the pancreas and the liver. Dr. Kunde has shown that in complete fasts of fifteen days or more in man and from thirty to fifty days in dogs there is an increase in the basal metabolic rate extending over many months after the fast has been broken. In dogs there is also an increased secretion of gastric juice and greater economy in the utilization of nutrients by the tissues. If these results should be confirmed and extended some of the apparent benefits from fasting may be rendered understandable on these

lines. Further, since in fasting the glandular tissues, among them the liver, pancreas, gastro-intestinal mucosa, thyroids and gonads, suffer great loss of weight, it is not improbable that in re-alimentation these organs respond with increased cell division and therefore may be said to be partly rejuvenated. This matter requires further investigation before it can be put forth as a basis for fasting therapy.

It has been suggested that nature itself points toward a fasting therapy in those diseases that are accompanied by decreased hunger and appetite. But the success of the newer regimen of "feeding fevers" questions the inference. The ills of over-eating and the dangers of partial starvation are relative, and excessive claims are advanced in both directions.

Among some people in this country, fasting as a road to health has become an unscientific if not an injurious fad. On the other hand, some physicians go to the other extreme in holding that short periods of complete abstinence from food, and longer periods of severe restriction in calory intake, are always dangerous proceedings. Some of Dr. Sprigg's conclusions are still tentative. More controlled observations both in the clinic and in the laboratory are needed before the final word can be said on the value and the limitations of fasting. But if there is real albeit limited merit in the fasting therapy, its aroma of cultism and occultism is no deterrent.—*Journal of the A. M. A.*, April 6, 1929.

THE INTEMPERANCE OF PROHIBITIONISTS

In discussing the intemperance of prohibitionists we do not refer to indulgence in alcoholic beverages, even though it is possible and perhaps probable that some of the prohibition fanatics slyly indulge in an occasional taste of "booze" in some form, just as some of our dry Congressmen, if all reports are true, do not vote as they drink. That to which we especially refer is the species of intemperance in speech indulged in by many fanatical prohibitionists and conspicuously emphasized by the action of Rev. Clarence True Wilson, chairman of the Methodist Church Board of Temperance, Prohibition and Public Morals, and noted dry leader, who on the occasion of the annual session of the American Medical Association, at Portland, Oregon, July 8th to 12th, went out of his way to malign and misrepresent Dr. William S. Thayer, of Baltimore, president of the A. M. A., and to utter a falsehood concerning Dr. Thayer's election as president. The specific charge blatantly published in the daily newspapers was that bootleggers and wet boosters influenced the house of delegates of the A. M. A. to elect Dr. William S. Thayer as president.

Reverend Wilson's outburst seems to have been incited by a paragraph in Dr. Thayer's presi-

dential address in which regret was expressed concerning the tendency on the part of federal, state and municipal authorities to dictate unfairly as to what citizens shall eat, dress or wear. Undoubtedly Dr. Thayer had in mind more particularly the restriction of the medical profession in prescribing alcoholic beverages or anything else deemed by them necessary for relief of illness. Very naturally, the house of delegates took exception to the misrepresentations as well as false charges referring to the honor and integrity of that body, and in no uncertain terms branded the Rev. Wilson as a falsifier. It also expressed its surprise that a doctor of divinity, supposed to be honest, truthful and imbued with the ideals of Christianity, should make statements which every member of the House of Delegates as well as the Rev. Wilson himself know to be unfounded and absolutely untrue. As a matter of fact Dr. Thayer probably received many more votes from those avowedly dry than from those avowedly wet, and it is a demonstrable fact that the opponent of Dr. Thayer, reputed by the Rev. Wilson as being dry, had an avowedly wet campaign manager and received the votes of a large number of avowedly wet delegates. In reality no election ever was held by the House of Delegates of the A. M. A. in which the wet and dry proposition was even remotely considered or thought of, nor had the slightest bearing upon the election.

The delegates attending the Portland session, a majority of whom have been in the House of Delegates for many years, very justly resented the gratuitous insult offered by the reverend gentleman who is chairman of the Methodist Church Board of Temperance, Prohibition and Public Morals. He did, however, as a result of his intemperate remarks and false accusations, succeed in getting the House of Delegates to put itself on record through a committee report, adopted unanimously, which reads as follows: "The committee expressly commends and endorses the sentiments expressed by Doctor Thayer concerning legislative enactments that are inimical to the best interests of the medical profession and public by restricting medical men as to what and what not shall be prescribed for the relief of human ills." Rev. Wilson's personal attack was answered by Doctor Thayer as follows: "I have never taken either a wet or dry side publicly. I have not even thought of it. My remarks were quite clear and simple. I am sorry I incited anyone to so much evil intention. * * * I can only regard this statement (Rev. Wilson's) as a pathetic example of that sort of intemperance to which I referred yesterday. Insofar as the statement relates to me it is radically and completely untrue."

Those who conscientiously believe that prohibition represents a principle that should be supported by all right-thinking people must feel abashed when they consider that the cause is so

detrimentally represented by an unreasoning fanatic like the Reverend Clarence True Wilson. A cause that is just in principle requires no misrepresentation or falsehood to further it or to make it an active force for good. On the other hand a righteous cause is harmed distinctly by the species of intemperance exhibited by the Rev. Wilson, as represented by his conduct in Portland, and for which he told the newspapers he had no apology. It even was reported on the streets of Portland that the Rev. Wilson said in the presence of numerous hearers that the government hospital ship "Relief" had been sent to Portland to bootleg whiskey for the physicians attending the A. M. A. convention. Under ordinary circumstances we scarcely would believe that a man of Rev. Wilson's standing would make such an astounding charge, and yet in view of the utter falsity of the other charges he made while the A. M. A. was in session in Portland, it requires little urge for us to believe that he would be guilty of most anything in the way of falsity and inconsistency to support his radical prohibition views. Furthermore, within the last few days the newspapers have charged him with equally as frenzied and untrue statements concerning the use of tobacco by women and young girls, with a wholly unsupported view that babies born of tobacco-smoking mothers are destined to ills and a shorter term of life in consequence of the mother's tobacco indulgence. How long will the Methodist Church and the prohibition forces put up with the leadership of a man who so openly and flagrantly twists and distorts facts, or even resorts to falsification?

THE PHYSICIAN'S COMPENSATION

It probably is true, as stated by numerous writers, that the number of physicians is decreasing while the population is increasing, yet incomes from the practice of medicine on the whole are on the decrease and certainly are not keeping up with the increase in the cost of living. While it may be true that there is a decrease in need for physicians, on account of better health conditions, yet the principal cause for decrease in incomes is inroads made into the practices of all physicians by public health agencies, benevolent associations, free clinics, and other organizations that are competing with the regular practitioner of medicine. An observant lawyer made a trite statement when he said, "You doctors never did and never will stick together for your own advancement. You are jealous of each other's success, and your rivalry leads you to economic practices that are suicidal to individual physicians as well as the medical profession as a whole." Recently lay persons have undertaken to furnish medical and surgical services in quantity at reduced or quantity prices, and strange as it may seem there are physicians not suffering for want of practice or comfortable incomes who are

willing to work for these lay organizations and thus help to reduce the economic status of medical men in general.

Isn't it about time for medical men to unite in a common cause which in its ultimate analysis means self-preservation? The physician has skilled services to sell and why shouldn't he be paid adequately by those able to pay? He always has been and always will be charitable, but it is an inconsistent and irrational theory to advance that he should donate his services to those who rightfully are community charges and should have medical and surgical services provided and paid for by the community just as other necessities such as food, clothing and shelter are provided and paid for by the community. Neither should the physician be subjected to the indignity of being asked to furnish medical and surgical services at a reduced price or an almost charity basis to people in moderate circumstances who are enjoying many of the luxuries of life and who do not expect a reduction in price for other necessities. Furthermore, why should the physician be asked or expected to furnish medical and surgical services to the rich or well to do for fees that are charged those in moderate circumstances? Trustworthy services should be available to the indigent and poor just as they are available to the rich, and the medical profession as a profession should take such steps as will make it possible for such condition of affairs to exist, but there is absolutely no justifiable reason why medical men should be imposed upon as they are, and be subjected to the unfair competition of public health officials, clinics and welfare organizations, nor should they be subjected to the necessity of engaging in competitive bidding to secure insurance or industrial work.

The economic problems confronting the medical profession are many and growing in their seriousness. For the most part we have been too busy trying to keep abreast of the times scientifically and in upholding a rigid code of ethics while at the same time we have rejected some of the cardinal rules of the business side of our work. The time is ripe for a change of tactics and the pledging of allegiance to the old saying, "The laborer is worthy of his hire." We can protect ourselves, with no injustice to others, and we must begin to do it or we are not going to survive as individual practitioners.

THE ROCKEFELLER FOUNDATION

ITS HEALTH CONSERVATION ENTERPRISES

During 1928 there was an amalgamation and reorganization of the various Rockefeller benevolences so that in the beginning of 1929 all of those agencies were included under the Rockefeller Foundation. The book value of the combined resources is now more than \$203,000,000, with outstanding obligations of \$35,000,000. According to a statement just issued the Foundation

has paid out from income and principle a total of nearly \$145,000,000 since 1913. Emphasis has been given to the training of physicians, health officers and nurses, the creation or strengthening of institutions of medical or public health education, the building up of official health organizations, the promotion of field research, and the demonstration of new methods. The World War called for exceptional aid to medical services, social work in army camps, and emergency relief, notably for children. For these purposes \$22,000,000 was appropriated. Temporary anti-hookworm campaigns in the United States and in many other countries have been broadened into permanent official rural health organizations. Malaria has been studied more fully and methods of control and treatment have been carefully worked out at home and abroad. Yellow fever has been forced to retreat from Mexico and Central America and from northern South America, until it is now found only in Brazil and west Africa. A war-time anti-tuberculosis organization built up with Foundation aid in France, has been wholly taken over by the French and is being incorporated into a general public health service. Various schools and institutions of public health have been created or extended with Foundation funds. For the strengthening of the influential medical schools in many parts of the world from London to Singapore, the Foundation has expended about \$29,000,000. This does not include building, equipment and support of the Peking Union Medical College and aid to hospitals and the pre-medical sciences in China. Up to December 31, 1928, fellowships had been granted to 3,187 representatives of 58 countries at a total cost of nearly \$5,000,000. The international significance of these fellowships may be inferred from the fact that 1,383 of the total fellows pursued their studies in countries other than their own.

Concerning the relationship of the physician to the public the official report of the Foundation has considerable to say. It is pointed out that upon the medical school rests the obligation to put the future physician in the way of understanding and accepting his responsibility toward the public health. Medical practice calls for expensive equipment; specialization forces an organization of professional services; it grows harder to practice alone; hospitals are developing in number, capacity, equipment and efficiency; clinics and health centers have sprung up; visiting nurses are active; great industries have organized their own services of medical care and hygiene; and the European countries have established state health insurance schemes. In this new situation four groups are trying to adjust their relations:

the physicians, the health officers, the leaders of private or voluntary health societies, and that vast inclusive group known as the public. Each has interests to protect and promote. There are inevitable suspicions, fears, competitions and clashes. The physician thinks that a health center is taking away his practice; the public health officer believes that a private agency is usurping his functions; the public declares that it is being exploited or tyrannized by the health department. The officers of the Foundation say that the only solution to be found is the discovery of common interests and in the gradual extension of these toward complete accord. Already in many places successful plans of cooperation have been worked out. Physicians are loyally supporting public and private health activities only to discover that an increased community interest in personal hygiene, school health, maternal and child welfare is sending more and more patients to private practitioners. The public health staff becomes in a sense agents for the physicians who in turn man and strengthen the institutions of prevention.

We may with propriety question the optimistic conclusions of the Foundation, but the fact remains that with the changing conditions of the day and its multiplicity of problems, a careful analysis pertaining to health preservation and especially pertaining to the economic phase of the question, is indicated. In the solution of the public health problems the Rockefeller Foundation has supported and will continue to support the training of physicians and health officers, but has and will limit its direct aid for health organization and activity to official governmental agencies,—national, provincial and local. The reason for this is that the Foundation considers that governmental services are responsible, permanent, and likely to perpetuate improved methods when these have been tested and found feasible and effective.

A theory that seems to be gaining prominence in some quarters is that individual practitioners of medicine are not able to cope with the problems arising in connection with the care of individual health and to a much less extent community health. Again the question arises as to whether the medical profession as a profession will join in formulating and adopting plans that not only meet the demands of changing conditions but at the same time protect the interests of the members of the medical profession individually and collectively. The problem requires constructive thought, and the solution of it will necessitate careful analysis of all the factors pertaining to it. To our notion the best interests of all will not be protected by destroying the private practitioner of medicine. The acceptance of any form of community service for all phases of health conservation and preservation for all the people will not work out well

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

UNDER "Society Proceedings" this month we are printing the preliminary scientific program for the Evansville session. Read it on page 341.

PAY no money to agents, even to agents representing well-known books or medical journals. This is sound advice and will save physicians money if they heed it.

If you forget the actual dates of the annual session of the Indiana State Medical Association, just remember that every year the session is held on the last Wednesday, Thursday and Friday of the month of September.

HAVE you said enough to patients concerning vacation typhoid and how to prevent it? Typhoid vaccination is a preventive, but it should be given three weeks before the vacation, as three inoculations a week apart are necessary.

READ the program for the Evansville session published in this number of THE JOURNAL. The scientific papers and discussions will be a treat for all those who attend the session, and the social features add attractions that will increase the profit gained from attendance.

THE circulation of *Hygeia*, the lay health magazine published by the American Medical Association, has increased by leaps and bounds, but it still fails to receive as much support from members of the medical profession as it deserves. Why not subscribe for *Hygeia* and have it on the reception room table for patients to read?

For Sale—One set of standard golf clubs, in good condition though showing some evidence of wear as well as abuse by an artistically profane dub golfer who, since his wife has acquired the state women's golf championship for the second time, is ashamed to admit that he ever swung a club. Address The Editor of THE JOURNAL.

INDIANA was represented in the Woman's Auxiliary of the A. M. A. at the Portland session by Mrs. Frank W. Cregor, of Indianapolis, who is

vice-president of the Association for the current year. Mrs. Cregor proved a very worthy representative, and she was honored still further by being selected as one of the executive committee of the national auxiliary for the coming year.

THE revised section of the Principles of Medical Ethics as adopted at the Portland session of the A. M. A. now reads: "When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called, or under any guise or pretext whatsoever."

WE believe that the Evansville session will be an unusually good one, both as to scientific program and social features. This month we are publishing the preliminary scientific program for the session which will be held September 25, 26 and 27. Please read it carefully so that you may have some idea of the many good things in store for you. The complete program will be published in the September number.

COMMENTING upon "Bobby" Jones' wonderful golf playing in the national tournament, Arthur Brisbane says, "Anybody can play good golf—for a little while." If we thought that was true we would take on renewed hope, for we and every other dub golfer know that the statement is not true. We wonder if Brisbane plays golf, or if he ever heard of the coordination required in good golf playing which some men and women never can acquire.

THE dean of one of the large medical schools of Chicago says that the majority of our medical schools are practicing medicine in competition with their own graduates. This comment was in connection with the discussion of the abuse of medical charity by the medical school clinic. The free clinics of all of our teaching institutions should be revised, and rules laid down which exclude any but the deserving poor from the charity clinic.

CHAIN radio programs now offer some quack remedy advertising, and even flattering endorsement of some quack doctors, that is positively detrimental to the best interests of the public because gullible people are very apt to be deceived by the specious advice or recommendations given. However, as long as publicity of almost any kind may be bought we may expect the radio interests to countenance if not encourage medical propaganda of the quack type.

CONCERNING the question of advertising by the reputable practitioner of medicine, President Thayer of the A. M. A., at the Portland session,

offered a wise comment as follows: "There is nothing immoral about advertising itself, but in the case of the conscientious physician it is suicidal. Such a physician cannot compete with a man without conscience when it comes to advertising. He cannot promise so much."

THE late Frank Lydston used to say that a physician represented the lowest order of animal life in one respect, in that he is like a jelly fish that pays absolutely no attention to self-preservation or self-defense. We are reminded of this when we think of the indifference and apathy with which most physicians look upon the slow encroachment of socialized medicine. Well, no physician can say that he has not been warned!

THE sale and distribution of inflammable x-ray films has been prohibited in New York State through an order of the commissioner of health whose action, outside of the city of New York, has the effect of law. In the city of New York the fire department has taken hold of the matter by prohibiting the sale or distribution of inflammable x-ray films. It is expected that this action will be duplicated by other states and, if so, there should be no repetition of the Cleveland disaster.

SOMETIMES a physician who tries to save his patient from pecuniary expense finds that his efforts are misunderstood and end disastrously. Thus, in Michigan two suits for malpractice resulted in damages assessed against the defendant, and in both cases it is said that the judgment was founded upon the mistake on the part of the defendants in not using roentgenograms as a means of diagnosis of fracture. In such cases a plea that an effort was made to save expense for the patient is of no avail.

DR. BUNDENSEN, health commissioner for the city of Chicago, voluntarily resigned membership in the Chicago Medical Society as a protest against the expulsion of his friend, Dr. Louis Schmidt. It is one thing to resign and another thing to get back again when you want to do so. We are of the opinion that Dr. Bundensen eventually will want to get back into organized medicine and probably will have one heck of a time making reputable men believe that he is entitled to recognition. You always can fight better in an organization than you can out of it.

RECENTLY Ohio passed a bill requiring municipalities or townships to furnish medical, hospital and quarantine services to indigent persons. Similar bills should have been passed by our Indiana legislature. It is a duty for every community to take care of its indigent, including the furnishing of medical and hospital attention, and the community should pay for the service. The medical profession should not be expected or required to

bear the burden of furnishing professional services gratuitously for the indigent any more than the grocer is expected to furnish food gratuitously for the indigent.

A BOSTON goiter expert, Dr. Frank H. Lahey, says that "goiter treatment and surgery is not the undertaking of an individual but should be done by a highly organized group. As long as thyroid surgery is done on the same plane as hernia, tonsillectomy, etc., there will be a high mortality result. In thyroid surgery the physician should be extremely critical in his diagnosis of the patient who does not have clinical evidences of goiter. Great care should be exercised in preparing the patient for removal of a goiter if necessary. Much can be done by rest, fluid, iodine and carbohydrates."

MANY laymen seem to take special delight in criticizing the physician for living up to a code of ethics, and forget that some form of ethics is followed by people in all vocations of life. In the legal profession the code of ethics is equally as stringent and binding as the code of ethics pertaining to the practice of medicine. Even bootleggers have a code of ethics, and it is seldom that they do not suffer the extreme penalty rather than be guilty of a breach of their ethics. It is unfortunate that physicians are not equally as interested in upholding their code and supported by the public for doing it.

PHYSICIANS and surgeons are advised that there is now a new, electrically operated bladeless razor, based on a combination of shearing and nipping by rapid vibration at high speed of the inner two parallel slotted plates. It is only slightly larger than the safety razors now in general use and can be attached to the ordinary light socket. As the hair falls through the slotted plates it is nipped off closely. They say that it is impossible to cut or abrade the skin no matter how hard the razor is pressed. It is expected that the razor will find great favor in the offices of physicians and in hospitals where often it is unwise to use razors with sharp blades.

DR. D. T. QUIGLEY, of the surgical department of the University of Nebraska, in discussing the cancer problem at the Portland session of the A. M. A., said that whole wheat bread and plenty of milk and orange juice is considered a prime factor in the prevention of cancer. While Dr. Quigley was making these recommendations before a body of medical men, Dr. Fishbein, editor of the *Journal of the A. M. A.*, was talking before lay audiences and poking fun at the men who advocate whole wheat bread as an aid in the prevention of cancer! It looks as though we ought to get together on our recommendations or the public will continue to say, "Doctors never agree."

IN order to avoid any misunderstanding as to the real meaning of the section of the Code of Ethics pertaining to the division of fees, the House of Delegates of the A. M. A. has amended the code of ethics to read as follows:

Section III. When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called, or under any guise or pretext whatsoever.

This ought to settle the question definitely. It places responsibility of the collection of fees up to each individual physician, and does not permit the collecting of a joint fee whether the patient knows it or not.

A STATE medical association comparable to the Indiana State Medical Association pays its executive secretary ten thousand dollars per year, and its editor five thousand dollars per year, and considers the money well spent. These officers are not all-time men either. The members of the Indiana State Medical Association should be congratulated upon not being asked to pay their representatives such salaries or honorariums, even though the amount and character of the work done possibly would justify such expenditures. There is an immense amount of satisfaction in doing your best, no matter what the pecuniary compensation may be, and in Indiana there are some men who do things largely for the love of doing them.

TOM HENDRICKS, our genial executive secretary, is called upon for service of varying nature. Recently he secured information which makes it possible to place a blind paralytic in a home for appropriate care. In a variety of ways he is rendering personal and individual service to members of the Indiana State Medical Association, and recently he was asked if he would procure a baby carriage for a medical man residing in the outlying districts and he said he certainly would if the physician desiring such service would indicate the character of cab desired and the amount of money to be spent! All of which goes to show that Tom is on the job and willing to render real service to the members of the Indiana State Medical Association.

THERE was a time when surgery was done by the barbers. It looks now as though we are going to revert to that stage, for a New York barber is said to have shaved a man, given him a treatment for sunburn, and charged something like seven dollars for his "professional" services. A court made the barber refund seven dollars, probably on the theory that the barber was not licensed to practice medicine. However, he probably earned the seven dollars about as much as some of the chiropractors or mechanotherapists earn seven or more dollars that they charge for so-called "pro-

fessional" attention. Seriously considered, this practice of barbers tacking on several dollars extra to a patron's bill because of so-called treatment either with ultraviolet rays, massage, or some other manipulation, should be suppressed.

IF you want to know the joy of living take a vacation far from the haunts of men, and when you do this remember that you are adding to your fitness for caring for your everyday work when you are at home. No physician is too busy to take a vacation, nor is he too poor to afford a vacation. Rest and recreation are vital to his success as a practitioner of medicine. Personally we like a vacation when the fish are biting best, but anyway, when we take a real vacation we go fishing, and we confess that we look forward to it from one time to another, and we come home refreshed in mind and body and with a zest and interest in work that we otherwise would not have had. However, while opinions differ concerning the character of a vacation, to our notion one should do something that he likes to do, and certainly something that is entirely foreign to the practice of medicine.

DR. LOUIS E. SCHMIDT, expelled from membership in the Chicago Medical Society and the subject of considerable newspaper notoriety in consequence, attended the Portland session of the A. M. A., presumably for the purpose of making an appeal from the decision of his society. One of several reasons for Dr. Schmidt's expulsion was the fact that he seemed to court and did obtain considerable newspaper publicity in connection with his position with the Public Health Institute of Chicago, a frankly advertising organization. Evidently Dr. Schmidt has not lost his taste for publicity, for the lay press in Portland carried his picture and interviews concerning his case, and we are of the opinion that for one who can and should get back into reputable and organized medicine it is bad policy to permit his photograph to appear in the press of the Pacific Coast in connection with his appeal for reinstatement in respectable company.

WE desire to announce to our readers that we have discontinued carrying the free announcements of various postgraduate courses, clinics, and medical tours that are organized and conducted as a commercial enterprise for the profit of individuals. We are quite willing to publish the announcements of any and all reputable scientific organizations that are conducting postgraduate courses, clinics or even tours entirely in the interests of progressive medicine and for the benefit of the practitioner of medicine, without profit to any individual or individuals, but we do draw the line on other enterprises, of which there are several, that under the guise of altruism are affording commercial gain to one or more individ-

uals. We do not feel called upon to advertise gratuitously such enterprises any more than we feel called upon to advertise gratuitously the products of the Standard Oil Company merely because they are used in the everyday work of the physician.

ONE of the members of our Association criticizes pharmaceutical houses for offering prizes for orders for their products, and suggests that inasmuch as the prizes cost money it would be well to make a reduction on the price of the goods purchased and cut out the prizes. We suggest that the firm that offers green trading stamps or prizes of any kind for orders may be looked upon with some suspicion. We also think that some of the representatives of pharmaceutical houses traveling over Indiana offering cut-rate drugs and frankly admitting that their products are not quite up to a standard, but "almost as good as standard drugs," should be shown the door in the offices of all reputable physicians. When it comes to prescribing drugs or pharmaceuticals for illness, the best is none too good, and the physician who is looking for price when he buys drugs is never a good representative of trustworthy medical practice. Quality is the best and the cheapest in the long run.

IN view of the fact that many so-called prominent physicians of Indiana are being solicited to join the ranks of great men whose pictures and biographies are to be published in book form, we desire to call attention to a note we have seen in the May number of the *Bulletin of the Toledo Academy of Medicine* which reads as follows: "Several Toledo physicians have received flattering letters from a New York concern to send their biographies for publication in a biographical dictionary of the most prominent men and women. The requirement of those circularized is that they send ten dollars each in order that the biographical notices may appear. It would seem that the result would be a biographical dictionary of ten-dollar suckers. Dr. A. J. Cramp, of the Bureau of the American Medical Association states: 'It may be laid down as an axiom that all publications purporting to be biographies of noted men but requiring as a *sine qua non* the payment of a subscription before one becomes a noted man are humbugs.'"

L. W. DEAN, of Iowa, at the Portland session of the A. M. A., called attention to a fact recognized by ear specialists, that swimming is one of the most prolific causes of diseases of the middle ears and accessory sinuses of the nose. He might have added that some of the worst sinus and ear infections come from what are advertised as sanitary swimming pools in gymnasiums. It is true that a swimming pool may be so disinfected as to make it reasonably safe for the first

swimmer who enters it, but contamination occurs with use by two or more, no matter what precautions may be taken, and of course the contamination is all the greater with laxity in the process of purification. In reality the "old swimmin' hole" in the majority of instances is safer than the gymnasium swimming pool that is so easily contaminated and so often neglected in purification processes, but swimming under any conditions when water gets into the nasal passages and perhaps into the eustachian tubes is not free from danger as every busy otologist can testify.

CONCERNING the question of advertising by physicians, one of the highly respected members of the Indiana State Medical Association writes us as follows: "I quite agree with you that there is a difference in publicity if only facts are stated as to location, office hours and specialty when practicing. It is perfectly legitimate to put a card in THE JOURNAL or any other recognized medical periodical, but when it comes to lay publications I think that such cards are in mighty bad taste. There can be but one opinion about those who get themselves interviewed about supposedly wonderful operations or who read papers before medical societies and adroitly see to it that the substance of the paper with name attached is published in the lay press. This cannot be prevented altogether if a medical meeting occurs and a reporter who can write shorthand is present and takes down what actually is said. It may be done without the author knowing anything about it, and yet it is very regrettable, and whenever possible it should be prevented."

OUR editorials concerning some failures in dental practice that are of interest to medical men and so vitally important in connection with health preservation have been copied in numerous national and sectional dental journals throughout the United States, and commented upon favorably from a general standpoint though occasionally criticized as being too radical. The fact of the matter is that the average dentist does not sufficiently appreciate the relationship of his work to general health, nor how important his work is to the physician who is trying to save his patient from constitutional disturbances that often-times have their origin in mouth infection which the dentist can clean up. Any criticism that we have made of the dentist we have tried to make entirely constructive and with a view to bringing about greater cooperation between the dental and medical professions. We are highly pleased to think that what we have had to say on the subject has for the most part met with the cordial reception and endorsement of the leading national dental journals.

It may be of interest to physicians to know that the government continues an unceasing war

against fake medical remedies, and not infrequently we hear that certain well-advertised proprietary remedies have been branded fraudulent and their manufacture and sale prohibited. Unfortunately, these decisions do not receive the publicity deserved, and in consequence the public fails to get as much protection as it should have. Next to what the government is doing is the work of the Council on Pharmacy and Chemistry of the A. M. A., which constantly is exposing frauds and near-fraud in proprietary remedies. Even this work does not receive the publicity that it deserves, and we are sorry to say that even the medical profession does not give enough attention to the findings of the Council. Not a few physicians are duped by the manufacturers of proprietary remedies when such a fate could be avoided if more attention were given to the published findings of the Council of the A. M. A. It is passing strange that some people never pay any attention to warnings, and it reminds us of the reckless automobile driver who never looks to the right or left when going over a railroad track and sooner or later pays the penalty by being struck by a locomotive

"Concerning policies to be followed by THE JOURNAL of the Indiana State Medical Association in regard to maintaining a strict standard of ethics by physicians, the Bureau of Publicity desires to express its unreserved approval of the general policy pursued in the past by THE JOURNAL in relation to advertising.

"There is no neutral zone. All advertisements should state facts only and representations made by advertisers should be subject to strict scrutiny by the editor of THE JOURNAL. No favorable publicity through the columns of THE JOURNAL or through its advertisements should be given to physicians, pharmacists or any other person in any matter which is not strictly ethical.

"The Bureau also is glad to approve the criticism appearing in THE JOURNAL from time to time of physicians who seek notoriety or personal puffery through the local lay press.

"A medical journal should be the channel for the dissemination of scientific facts carefully thought out and clearly and ethically expressed."

Thanks for those kind words. The editor of THE JOURNAL has tried to maintain and support the traditions, ethics and proprieties of medical practice. Sometimes the work seems discouraging, but we'll "carry on."

THE New York importer who is said to have a corner on Spanish ergot, and who has been working himself into a rage concerning adulterated ergot preparations which he claims are foisted upon the medical profession by dishonest pharmaceutical manufacturers, and permitted by the United States government, publicly announced that the whole subject would come up for discus-

sion at the Portland session of the A. M. A. and that the editor of the *Journal of the A. M. A.* and those who have been suppressing rightful information that should go to the medical profession would have to answer to an indignant membership. Even the editors of state journals were included in the indictment and told that they, too, would have to answer for their acts. As a matter of fact the subject wasn't mentioned at the Portland session of the A. M. A., so far as we know, and there was no suppression of charges that anyone desired to make. In reality when a man who apparently has commercial ends to serve attempts to indict the government, a large number of reputable pharmaceutical manufacturing concerns, trustworthy pharmacologists, medical editors and members in the medical profession, he takes on a big contract and if, as it is charged, he is laboring wholly in the interests of personal aggrandizement his charges receive scant consideration.

IN several previous numbers of THE JOURNAL we have recommended the use of certified milk as in a general way least harmful, providing the source of supply can be regulated and supervised according to approved ideas on the subject. We also have been willing to admit that pasteurized milk perhaps is necessary for the average community that cannot put into effect the regulations necessary for certified milk. We are pleased to note that the American Association of Medical Milk Commissions at a recent meeting in Portland, Oregon, makes the following declaration: "It is safer to keep milk clean than to make it clean. Raw milk can be kept pure, but pasteurizing it or cooking it leaves whatever is destroyed dead in the product offered for consumption. Modern safeguards, as prescribed by medical milk commissions, are sufficient to meet every requirement of health and sanitation. Certified milk is a medical association product, and milk commissions have been organized to supervise the production of certified milk for use by physicians in infant and convalescent feeding. Tests required by these milk commissions include a general physical examination of animals and men handling them, the tuberculin test, and the agglutination test for detection of abortion infection. All animals found to react positively to these tests are removed from the herd."

AT the Portland session of the A. M. A. the Reverend Clarence True Wilson, of Washington, general secretary of the Methodist Church Board of Temperance, Prohibition and Public Morals, and a leader of the dry forces, had considerable to say to the lay press concerning the Association's attitude on prohibition, and the manner of conducting the election in the House of Delegates two years ago. We quote him from the lay press as follows: "I was in Washington looking on when Dr. William Gerry Morgan was nominated

for the presidency of the American Medical Association, and without a campaign stood in a dignified way and was voted for and came within a few votes of being elected, but Dr. Thayer's wet crowd came down from Baltimore in order to pull over a champion, and they canvassed and crusaded, and the unsuspecting body just barely did it, never thinking that there was a liquor deal in all that propaganda."

Such a statement is an insult to every member of the American Medical Association as well as the contending candidates for president at the election referred to, and deserved the rebuke received. There isn't a word of truth in the charge made. Dr. Wilson is said to have announced that he has no apologies to make and his statement stands as given. What fine Christian spirit he exhibits (?).

IN commenting on the high cost of medical care, and Dr. Harris' plan for solving the problem, the committee of the House of Delegates of the A. M. A. appointed to pass judgment on the plan had the following to say: "Your committee desires to reiterate what has been said concerning the agitation on the subject of the high cost of medical care, but it especially desires to call attention to a fact often overlooked, that the increased cost of sickness cannot be charged justly to the medical profession inasmuch as in a general way compensation for medical and surgical services has not increased in proportion to the increased cost of sickness occasioned by other factors. The committee recognizes that the cost of sickness may not be distributed evenly and may depend upon conditions over which the physician has no control. Competent and adequate service should be available to all, but the plan of distribution will require a continuation of constructive thought, and especially in view of the fact that a plan that may prove adequate for one community may not do for another, and any proposed plan may have to be modified to suit certain conditions or certain communities. Your committee does believe that this whole subject should receive the serious consideration of the medical profession, and that the problem confronting us in connection therewith must be solved by the medical profession and not by lay individuals or lay organizations."

THE Health and Hospital Service Bureau is another one of those lay schemes hatched in Chicago that is destined to throw a harpoon into the medical profession unless something is done to clip its prongs, and we have an idea that the insurance companies will do the clipping. In short, this new enterprise if paid a stipulated premium will furnish the best medical and hospital care for the insured throughout the period covered by the premium. Very naturally the scheme must come under the insurance law, and

as such be governed by insurance commissioners, so insurance companies are interested in the plan proposed. On the other hand, the medical profession will be interested in knowing just how the enterprise is to furnish the best of medical, surgical and hospital care unless such services are bought at cut-rate prices, and who is to be the judge as to whether the service is trustworthy or not? It has been charged openly that an individual or company can obtain at a fixed and modest salary the all-time services of the best medical and surgical men in the profession, and that eventually two-thirds of the medical men of the United States will be salaried men. Probably this new insurance scheme is a plan whereby, for a certain premium paid monthly, annually, or for a term of years, medical and surgical services will be furnished, and is based upon the idea that anything can be bought. How long will it be until independent private practitioners of medicine will be relics of the past and all medical men will be small salaried officers or clerks?

IN discussing medical economics before the Illinois State Medical Society, Dr. M. L. Harris, president of the A. M. A., says: "There is a great difference between benevolence and altruism. What one may do to the individual, the care he may give him, the charity he may bestow upon him, is an individual matter which comes from the heart of the one who is giving it, and that is an act of humanity. The practice of medicine is an humanitarian occupation. When it comes to altruism, or doing those things which would benefit the public, you have a matter of business, or at least it should be a matter of business for the physician. It is in this line that he is imposed upon to the greatest extent. The physician is imposed upon in the line of altruism greater than any other person. In every altruistic proposition which is brought before the public that involves the question of health, the physician is called upon, and he is called upon first. He is called upon to do altruistic work and philanthropic work, but he is not supposed to be compensated for it. Every other person engaged in carrying out the work of altruism is compensated for his labor, but the physician doing altruistic work is called upon to give of his time and labor for nothing. Now this is where the physician should have a little business acumen. He should learn to distinguish very clearly between his obligation to the public or to humanity and his obligation to the individual, and he should by this acumen be able to distinguish when he is asked to contribute his services to an altruistic proposition, between what part of it belongs to him as an individual and what part belongs to the community. He should contribute his work or his mite to the proposition to just the same extent as any other individual of the community, whether it be in the shape of money, work, or what not. When he has done that he

should see that his services beyond that point are properly compensated. His duty to the public extends just as far as the duty of every other public citizen extends and no farther."

THE official organ for the Society for the Prevention of Cruelty to Animals, known as *Our Dumb Animals*, in its March issue, has a criticism of the medical fraternity for subjecting colored new-born babies to a lumbar puncture for experimental study, and then goes on to say, "So far as we can learn, these various experiments, such as the one referred to above, and the tubercular ophthalmic test and others described in official hospital reports and medical reviews, are not performed upon the new-born children of families of wealth and influence. If they are entirely proper, justifiable, involving no peril of any kind to the child, why should not all children at birth be treated in the same way?" It is such inconsistent drivel, analogous to anti-vivisection nonsense, that helps to prevent scientific advance. In the first place, our clinics are recruited from the ranks of people unable to pay and who in a measure recompense for the service by permitting themselves to be studied by the medical profession. Lumbar puncture is harmless and is performed merely with the idea of adding to our knowledge concerning the condition of the spinal fluid at birth. The tubercular ophthalmic test (seldom used now) is employed among the rich and poor alike, and whenever there is indication for it the lumbar puncture test also is employed upon rich and poor alike. However, when you talk about equalization of privileges and social contact, one is treading on dangerous ground, and we submit that if the writer in *Our Dumb Animals* is preaching equalization perhaps he would be satisfied to have as a seatmate in the theater or church any sort of human derelict, whether black, brown or white, clean or dirty. The members of the Society for the Prevention of Cruelty to Animals are advocating and upholding policies and practices that in the main are most commendable, and we are sorry that they go off on tangents as much as they do concerning animal experimentation and many of the practices that have brought health and happiness to human as well as animal life. Like many other people who would like to reform the world, they go to the extreme and do much harm to their very worthy enterprise.

THE following Indiana physicians registered at the Portland session of the American Medical Association: Max A. Bahr, Indianapolis; Carl Boardman, Gary; Albert E. Bulson, Fort Wayne; Charles E. Caylor, Bluffton; F. W. Cregor, Indianapolis; Werner W. Duemling, Fort Wayne;

Burton W. Egan, Logansport; Harry Elliott, Brazil; L. H. Eshelman, Marion; Lawrence F. Fisher, South Bend; E. T. Gaddy, Indianapolis; J. F. Gillespie, Greencastle; Alfred S. Giordano, South Bend; A. B. Graham, Indianapolis; W. L. Green, Pekin; Homer G. Hamer, Indianapolis; James E. Keeling, Waldron; Charles M. Kennedy, Camden; Eva N. Kennedy, Camden; Alva M. Kirkpatrick, Columbus; Floyd A. Loop, Lafayette; Ernest L. Mattox, Terre Haute; P. E. McCown, Indianapolis; William J. Molloy, Muncie; W. R. Morrison, Kokomo; Arvine E. Mozingo, Indianapolis; Melvin D. Price, Indianapolis; B. W. Rhamy, Fort Wayne; David W. Robertson, Deputy; David Ross, Indianapolis; G. D. Scott, Sullivan; R. L. Sensenich, South Bend; A. G. Shauck, Arlington; Morrell Simpson, Bedford; P. N. Sutherland, Angola; David R. Ulmer, Terre Haute; Harry A. VanOsdol, Indianapolis; Frank E. Wiedemann, Terre Haute; Perry Woollery, Bedford, and Mr. Thomas A. Hendricks, executive secretary of the State Association, Indianapolis.

THE Bureau of Publicity of the Indiana State Medical Association continues to do excellent work. Every member of the Association should read the articles in the lay press that have been released by the Bureau, and recommend laymen to read them.

IF there is anything that will make the angels weep it is the apathetic attitude of a general practitioner concerning the significance of high blood pressure in the presence of demonstrable foci of infection and his failure to make any attempt to remove it. Thus a middle-aged patient may have two tonsils fairly dripping with infection, a mouth full of tooth root abscesses, and infection in other portions of the body in connection with a blood pressure that is rising rapidly, and yet the family physician may be perfectly oblivious to the danger and the necessity of adopting some course of action to eradicate the trouble. It is such complacency, and such superficial consideration of patients, that causes lack of confidence in some medical men who may wonder why their patients consult other physicians. In short, there are altogether too many physicians who are not rendering faithful and trustworthy service to their patients and in consequence they are overlooking conditions that should require their attention, as they also are overlooking opportunities for increasing the loyalty as well as compensation afforded by patrons. Some may say that this criticism is far fetched, but we know from observation that it is not, and we offer it as constructive criticism in the hope that some medical men will wake up.

SECRETARIES DEPARTMENT

ANNUAL SECRETARIES' CONFERENCE

(Continued from the July Issue)

TALKS BY SECRETARIES

"BETTER COUNTY SOCIETY PROGRAMS"

E. S. PARMENTER, M. D., (Fort Wayne Medical Society.): It seems to me that this meeting tonight gives us exactly what we want and tells us exactly what we mean by "Better County Society Programs." I would say if we want better society programs the best we can do is to have an essayist such as we have tonight.

Better county society programs are dependent upon the county society itself. As I come from one of the larger counties of the state it seems that our problem is the problem of the smaller county, stimulating into every member of the society some action, and that action becoming a co-operative action with every member of the society. Two things we have done in our society this year with the thought of stimulating cooperation and interest. To increase interest at our banquets—we have one each month—we have sold season tickets, guaranteeing to serve that banquet to members. This plan has been highly successful. With a membership of 125 we sold 40 season tickets. That gives the county secretary a nucleus to work upon. It has been successful.

Second thing to get cooperation has been a question of propaganda. We have used a new form of notice for our county society for inviting them to the meetings. On the upper part of that notice we have written some little propaganda which was usually collected by the propaganda committee, and, in general, it has discussed some question of public interest, and usually it has been diphtheria immunization. Sometimes it has had to do with some stimulus of a medical society meeting. Better county society programs is a matter of cooperation and action.

A. M. MITCHELL, M. D., (Vigo County Medical Society): I find that the best way to keep up the program, to get them better, is to find out what the men want. Local men got tired giving programs so we started giving post-graduate work. Dr. Emerson gave first post-graduate program. We then went back to local men giving programs. Got tired again. Now we have clinics. Meeting held first in one hospital and then in the other. Three or four men give cases, and one twenty-minute paper. We are now in our second year of this and the second year is just as successful as the first. About forty men attend. That is going to wear out and we are going to have to get something else.

If we'll get into the same plan as the labor organizations have done by having a walking delegate employed by the state, a man who has to be well selected and well paid, it will be his duty to

go through the state of Indiana, visit all county medical societies, get acquainted with all doctors, and he can stimulate all county societies, keep them up on all new ideas; he can send into the State Society asking for a speaker, programs. He is a man who can help them arrange their local programs. He can take complaints and suggestions and send them in to the state secretary and if they are of sufficient value, let him refer them to the House of Delegates. Somebody is starting up the militant organization in medicine to take up a political fight. This man can do more good than any militant organization can ever do. He can help the big organization and the little society. I believe if this is done it will better all organizations, both large and small.

O. G. BRUBAKER, M.D., (Wabash County Medical Society): One of the big problems of the small county society is the fact that it is small. In Wabash county, for several years we have been able to maintain about 66 2/3 percent attendance. We have been carrying on the supper plan for a number of years. Entertainment committee appointed. Duty of the committee to say which of two or three men will entertain society. Works in our county. Nurses entertaining county society tonight; 95 percent attendance there.

We have difficulty in getting our men to present papers. Self-advertisement, and it doesn't go so well. So for some time we haven't undertaken to prepare papers ourselves. But we invite men from Fort Wayne, Indianapolis, etc., and we have had some very good papers and discussions. Our men take active part in the general discussions.

Another problem: Petty jealousies. It has been the job of the secretary in large measure to get ahead of anything of that kind. I think the best way to do those things is to remember that no matter who the man is there is some good in him and to look for that good; in other words, personalize our admiration and depersonalize our animosities.

We try to sell the idea that it is a misdemeanor for a doctor not to go to his county society meeting.

I think a few of those things carried out in any society will be worth while.

PROBLEMS OF THE SMALL SIZED COUNTY MEDICAL SOCIETY

V. L. TURLEY, M.D. (Benton County Medical Society): For the past year we have had a program of some type at each meeting. The meetings were rotated in the six towns of the county, and the doctor or doctors of that town furnished the programs. The program committee arranges the tentative program for each meeting of the year. At least one-third of our programs are to be given by local men. The others by outside speakers. At one or more meetings we invite the county dental society. At another we invite our wives. One meeting is a joint meeting with the teachers

of the county. This meeting to be held in the fall at the time of the county institute of teachers. Besides this program we are trying to put over some new project each year.

Last year the society, as a whole, took over the medical work and inspection of the county farm. This year we are trying to put over a much greater project; that is, medical supervision of the county schools, and at this time it looks very favorable that we will succeed.

By this project the Medical Society endeavors to do the following, namely:

1. To examine all the preschool children early in the summer; check up their defects and try to get them back to their family physician and have them corrected before school in the fall.

2. Examination of all school children up to and including the fifth grade. This to be done when school opens in the fall. With these examinations cards and duplicates are filled in; one given to parents to be taken to the family physician; the other to be kept at the school so that there can be a check up at any time.

3. Examination of students for physical education and high school athletics.

4. First aid.

5. Medical certificate of school children after sick absences.

6. And last, but not least, preach the gospel of immunization.

The Medical Society will appoint one of its members as a supervisor for the routine work to be done; to see that there is the necessary check up on the pupils to get their defects corrected. The doctors of the various townships to do the examining of the children, when possible, and honest-to-God attempt to get the children back to their respective family physicians.

For this service the trustees are to appropriate a sum of money equivalent to one dollar (\$1.00) per child of school age or preschool age (\$1.00) to be checked against for the service rendered.

Now, this proposition is not yet in a workable form, but, as I say, it looks very favorable that we will be able to put it over this year.

During the programs that we have attempted during the last year our attendance at our County Medical Society meetings have increased from 49 percent in 1927-1928 to 68 percent in 1928-1929.

PROBLEMS OF COMBINED COUNTY SOCIETIES

A. L. SPINNING, M. D., (Fountain-Warren County Medical Society): We have a small number of doctors, sixteen in Fountain, five in Warren, about twenty-one members. We try to make our meetings entertaining, we always have a luncheon, similar to the one we had here and sometimes better. Ladies get it up. We very seldom have less than eighteen members present.

Dinner entertainment is a great feature. The cement roads are a great factor in getting attendance. We try to have about eight meetings each year, from October to June. Have meetings in various towns around. We are usually entertained in those towns by the ladies of the town or the church and the doctors usually pay for the expense.

We go over to Danville, Illinois, a few times every year, Lafayette, Crawfordsville, etc., and when they come to our meetings we try to entertain those fellows.

Our medical society meets tonight. I'm not there. Next month we'll have dinner just about like this only it will be fish out of the Wabash.

In September—note on notice—time to pay dues. We have \$21.00 a year for expense fund.

We always try to get a good talker to talk on something of interest to our section of the state.

Special occasion on the first of June each year—fish caught specially—good time not only for our own comfort but for our visitors.

Doctors go to a great deal of trouble to entertain us. They enjoy having us while we enjoy their hospitality.

PROBLEMS OF THE LARGER COUNTY MEDICAL SOCIETY

GEO. A. COLLETT, M. D., (Crawfordsville-Montgomery County Medical Society): Problems of the medical societies are no more or less than the problems of the individual doctors. The work cut out for the society then is to promote the welfare of the doctor in every possible way. The hardest problems we have are of our own making. Whenever a doctor becomes mercenary and attempts to exploit a part of the public or a given class, or whenever a certain field of medical practice is neglected, the reaction always comes in the form of criticism and activity outside the profession with its problems of "institutions" who feel they should do the doctor's work.

The real problem of the individual doctor, however, which should be solved by the help of the society are those of education and cooperation.

The society should promote post-graduate study. Each physician should spend at least two weeks away each year seeing what is being done in other places. Reports to the society should be made on their return.

A medical library with one doctor who will make its care and upkeep his hobby is badly needed in connection with each county society.

Post mortem examinations are more instructive than many books. They should be sought and urged in every possible way.

Co-operation is needed in making the hospital available and used by the profession as a whole. It is a wonderful aid in studying cases and should be available to all the people through the family physician. The problems of the future, in fact the very existence of the profession can only be solved

by cooperation. There must be vision and large outlook on the part of the leaders for "where there is no vision the people perish."

W. F. CARVER, M. D., (Noble County Medical Society): We have twenty-four doctors in the county. Every one a member of the county medical society.

Four counties got together, organized the Northeastern Academy of Medicine. We agreed that this organization should be the scientific side of our organization, and preserve our county organization for business purposes.

For four or five years we conducted our own post-graduate courses. Last year we took up the Indiana University Extension courses.

We have a banquet once a month with a good attendance.

About our county medical society. We still have a good attendance. The blue gills and the beer are right in July. Full attendance.

Business side. For a long time the Noble County Society contracted with the trustee for the treatment of the poor. This law was changed and business put entirely in the hands of the trustee. Very much to our surprise we find that we are getting quite a good deal more money than we used to get. The trustee has been educated to take care of the poor and it is working

AMERICAN MEDICAL ASSOCIATION

Chicago, May 20, 1929.

Mr. Thomas A. Hendricks,
Indianapolis, Indiana:

Dear Mr. Hendricks:

I am delighted to have your letter of May 16 and to learn therefrom that the component county secretaries of Indiana have voted to hold their 1930 spring conference in Chicago.

It will be a great pleasure for us to have the Indiana secretaries here and we shall be glad to do anything that we can to contribute to their comfort and convenience while they are in Chicago. I specifically asked Dr. Harris to extend the invitation and I am greatly pleased at the outcome.

We have had the pleasure of having the secretaries of Michigan and those of Wisconsin meet here. The same sort of program was put on in both instances. The morning was devoted to short talks by the department heads, who devoted themselves entirely to discussions of the work of the American Medical Association. The afternoon was given over to an inspection of the building, the secretaries having been divided into small groups and personally conducted throughout the house.

The Michigan State Council came along with the county secretaries from that state and had one of their regular meetings here.

If you desire to have us supply the morning program, we shall be glad to do so.

If you will be good enough to let me know just what you and the Indiana County Medical Secretaries want, we shall do our best to give it to you.

Very sincerely yours,
(Signed)

OLIN WEST.

DEATHS



LAFAYETTE PAGE, M.D.

LAFAYETTE PAGE, M.D., aged sixty-six years, noted benefactor and specialist, died July 14th at his home in Indianapolis. Heart disease, from which he had suffered for many years, was the cause of his death.

Dr. Page was the originator of the idea of a hospital for children, to be named for James Whitcomb Riley, but the beginning of the war temporarily halted progress in this direction. Dr. Page and James Whitcomb Riley were close friends for many years, and at the close of his military service, Dr. Page again became interested in plans for the institution which finally developed into the James Whitcomb Riley Hospital for Children.

Dr. Page held the rank of major in the medical corps of the U. S. Army. He was placed in charge of the nose, throat and ear department of the Lilly Base Hospital in France, which later was known as United States Army Base Hospital No. 32, and was attached to this organization during the entire period of the war. As a result of Dr. Page's experimental and research work in the treatment of gas burns of the respiratory tract, caused by inhalation of gas fumes, a marked decrease in the serious effects of gas burns was noted and his suggestions and recommendations were adopted by all the allied forces. This service won recognition for him throughout the French and allied medical services as well as in the A. E. F. Dr. Page possessed a fine executive ability.

Dr. Page graduated from the Medical College of Indiana, Indianapolis, in 1888. He began to devote special attention to diseases of the nose, throat and ear after two years of general practice and his skill and success in his specialty gained for him an international reputation. Dr. Page was one of eight men who on June 10th of this

year received the highest gift of Indiana University, the honorary degree of Doctor of Laws.

In an effort to regain his health Dr. and Mrs. Page made a tour of the world, returning to their home in Indianapolis April 15th. A week later Dr. Page became ill and his condition grew steadily worse. He is survived by his widow, two sons, Lafayette Page, Jr., and Dr. Irvine Page, and one daughter, Mrs. Thomas Fisher, of Chicago.

Dr. Page was professor of otology, rhinology and laryngology in the Indiana University School of Medicine. He was a member of the American Academy of Ophthalmology and Otolaryngology, the American Ophthalmological Society, the American College of Surgeons, the American Bronchoscopic Society, the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He also was a member of many social and educational clubs in Indianapolis.

FRANK H. BLOOMER, M.D., of Lagro, died July 7th, aged eighty-two years. He graduated from the Medical College of Ohio, Cincinnati, in 1873.

UNION T. TAYLOR, M.D., of Newburgh, died July 10th, aged seventy-five years. Dr. Taylor graduated from the Hospital College of Medicine, Louisville, in 1898.

SAMUEL R. CHANCELLOR, M.D., of Kokomo, died July 5th, aged sixty-one years. He had retired from active practice three years ago. He graduated from Rush Medical College, Chicago, in 1889.

DANIEL D. ROSE, M.D., of Valparaiso, aged eighty-six years, died June 19th. Dr. Rose was not in active practice at the time of his death. He graduated from the University of Louisville, School of Medicine, in 1880.

LYMAN E. OTT, M.D., of Franklin, died July 12th, aged seventy-five years. Dr. Ott had been a practicing physician in Franklin for many years but had retired from practice a few years before his death. He was a graduate of the Jefferson Medical College of Philadelphia in 1882.

DAVID W. HEBBLE, M.D., of North Terre Haute, died July 7th, aged sixty years. Dr. Hebble was a member of the Vigo County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Starling Medical College, Columbus, Ohio, in 1890.

JAMES W. WRIGHT, M.D., of Kokomo, died June 23rd, aged seventy-three years. Dr. Wright had been seriously ill for several weeks. Death

was caused by carcinoma. He had practiced in Kokomo continuously for forty-four years. Dr. Wright was a member of the Howard County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Ohio, Cincinnati, in 1884.

NEWS NOTES AND PERSONALS

MISS AGNES M. WELCH, of Indianapolis, and Dr. Paul B. Kernel, of Indianapolis, were married July 4th.

THE Perry County Medical Society held its regular meeting June 25th at the home of Dr. John E. Taylor, of Leopold.

DR. J. S. BOYERS, of Decatur, is retiring from the practice of medicine after practicing in Decatur for more than forty-six years.

THE Medical Protective Company has announced removal of its offices from 35 East Wacker Drive to 360 North Michigan Boulevard, Chicago.

DR. A. J. HOSTETLER has been made president of the Indiana State Board of Health. Dr. C. R. Marshall, of Indianapolis, was made vice-president.

ANNOUNCEMENT has been made of the marriage of Miss Evelyn Shipman, of Indianapolis, and Dr. S. L. Mouser, of Indianapolis, which occurred on July 3rd.

THE Bureau of Publicity of the Indiana State Medical Association has been asked to cooperate in an advisory capacity with the Indianapolis Council of Social Agencies.

THE June meeting of the Jay County Medical Society was held at Portland, June 7th. Papers were presented by Drs. H. O. Bruggeman and L. P. Drayer, of Fort Wayne.

THE clinical congress and the eighth annual meeting of the American College of Physical Therapy will be held in Chicago, November 4, 5, and 6, with headquarters at the Hotel Sherman.

THE U. S. Civil Service Commission announces competitive examinations for Social Workers (psychiatric) and Junior Social Worker. Applications will be rated as received by the Civil Service Commission at Washington, D. C., until December 30th. Examinations are to fill vacancies in hospitals of the Veterans Bureau throughout the United States.

HERBERT C. HOOVER has honored the First International Congress on Mental Hygiene by accepting the position of honorary president. The Congress will meet in Washington, D. C., May 5-10, 1930.

DR. MARGARET TELFER, assistant Indiana University physician, has sailed for Europe, where she will spend several weeks making tours of inspection in the hospitals of Ireland, Scotland and England.

DR. AND MRS. A. M. HETHERINGTON, of Indianapolis, have returned from an extended trip to California and the southwest. They returned by way of the northwest and Canadian Rockies. Dr. Hetherington visited the Mayo Clinic on the return trip.

THE U. S. Civil Service Commission announces open competitive examinations for senior toxicologist, toxicologist, associate toxicologist and assistant toxicologist. Applications for these positions must be on file with the Civil Service Commission at Washington, D. C., not later than August 28.

Mr. Harvey T. Sethman, the new executive secretary of the Colorado State Medical Society, spent two days early in June visiting the headquarters office of the Indiana State Medical Association. He reviewed the work of the executive office of the Association and also that of the Bureau of Publicity.

THE June meeting of the Fountain-Warren County Medical Society was held in Covington, June 13. Sixty-eight plates were laid for the annual fish fry. Following the banquet, Dr. William F. King, secretary of the Indiana State Board of Health, presented a paper, his subject being "Undulant or Malta Fever."

IN recognition of "the most outstanding achievement in the prevention of blindness and the conservation of vision," Dr. Ernest Fuchs, of Vienna, Austria, will be awarded the Leslie Dana Gold Medal for 1929. Presentation will be made at the International Ophthalmological Congress in Amsterdam, Holland, September 10th.

AT a meeting of the American Society of Clinical Pathologists held at Portland, Oregon, in July, Dr. A. S. Giordano, of South Bend, was elected a member of the executive committee for three years, and Dr. Frank P. Hunter, of Lafayette, and Dr. Harold Langdon, of Indianapolis, were elected members of the Association.

THE U. S. Civil Service Commission announces open competitive examinations for physician and associate physician, applications for which posi-

tions must be on file with the Civil Service Commission at Washington, D. C., not later than December 30th. Examinations are to fill vacancies in hospitals of the Veetrans' Bureau for duty throughout the United States.

THE United States Civil Service Commission at Washington, D. C., announces open competitive examination for Physiotherapy Aide, applications for which position must be on file with the U. S. Civil Service Commission not later than September 10th, 1929. Complete information concerning requirements, salaries, etc., may be obtained by writing to the U. S. Civil Service Commission at Washington, D. C.

THE U. S. Civil Service Commission announces open competitive examinations for associate medical officer and assistant medical officer. Applications for these positions must be on file with the Commission at Washington, D. C., not later than December 30th. Examinations are to fill vacancies in hospitals of the Public Health Service, Indian Service and in other establishments of the federal classified service throughout the United States.

MR. C. W. STEWART, of Indianapolis, has been authorized to act as agent for *Hygeia*, the magazine published for the laity by the American Medical Association. Mr. Stewart has the approval of the American Medical Association, through the circulation manager of *Hygeia*, and of the Bureau of Publicity of the Indiana State Medical Association. The Bureau will appreciate any help or suggestions given him which will promote the wide circulation of *Hygeia*.

A COURSE of instruction in physical therapy sponsored by the American Electrotherapeutic Association and the Western Association of Physical Therapy will be given at Indianapolis, September 9th and 10th. Headquarters will be at the Hotel Lincoln. Class membership is limited to licensed physicians, medical students and technicians properly sponsored by their employers. Registration must be made in advance. Registration blanks and complete information may be obtained by addressing C. C. Vinton, M.D., 47 Willow Street, Brooklyn, N. Y.

AT the election of officers for the American Society of Clinical Pathologists, Dr. H. H. Fosskett, of Portland, Oregon, was made vice-president, Dr. K. M. Lynch, of Charleston, S. C., president-elect, and Dr. J. H. Black, of Dallas, Texas, was installed as president. Dr. A. S. Giordano, of South Bend, was made a member of the executive committee of the association and at the close of the meeting it was announced that eleven new members had been voted into the society,

among them being Dr. Frank P. Hunter, of Lafayette, and Dr. Harry Langdon, of Indianapolis.

THE Executive Council of the American Association for the Study of Goiter has announced that a prize of three hundred dollars and a medal of honor will be awarded by the association to the author of the best essay based upon original research work on any phase of goiter, presented at their annual meeting at Seattle, Washington, in September, 1930. Competing manuscripts must be in the hands of the Corresponding Secretary by July 4, 1930. Full particulars of regulations governing details of the offer will be furnished on application to the secretary, Dr. J. R. Yung, Rose Dispensary Building, Terre Haute, Indiana.

THE Indiana Tuberculosis Association offers short courses in tuberculosis to the physicians of Indiana. Several sanatoria of the state will be used as teaching centers for the physicians in that vicinity, although anyone wishing to attend the course may select any place preferred. Only two days will be devoted to the work. The purpose of the course is to acquaint physicians with recent progress in the treatment of tuberculosis. Courses will be held at the Lake County Tuberculosis Sanatorium, the Boehne Tuberculosis Hospital, Sunnyside Sanatorium, Irene Byron Sanatorium and the Indiana State Sanatorium. There will be no fee attached to the course, which is being presented as an aid to the medical profession. Complete information may be obtained by addressing the Indiana Tuberculosis Association, Indianapolis.

IN addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Parke, Davis & Co.:
Ampoules of Pitocin.
Ampoules of Pitressin.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION

THE EVANSVILLE SESSION

A scientific program of unusual practical value and an entertainment program of varied features has been completed for the Eightieth Annual Meeting of the Indiana State Medical Association to be held Wednesday, Thursday and Friday, September 25th, 26th, and 27th. Official headquarters will be the Hotel McCurdy at Evansville where most of the scientific meetings and all the business sessions are to be held.

After a lapse of three years, the program committee has returned to the plan of sectional meetings on Thursday afternoon and Friday morning, thus giving the physician who attends the meeting a greater selection of subjects than is possible when all scientific sessions are general in character. Many leading outstate men are on the Evansville program, not only for the general meeting on Thursday morning, September 26, but also for the sectional meetings Thursday afternoon and Friday morning.

Among the leading attractions on the program will be the visit of all who attend the meeting to the Evansville State Hospital as guests of C. E. Laughlin, M.D., medical superintendent of the hospital. Doctor Laughlin will throw the doors of his institution open all day Wednesday, September 25, to the profession and to the health officers of the state whose convention will be held at Evansville immediately preceding the state meeting. All will be guests of Doctor Laughlin at noon for luncheon. This invitation includes wives and families. Earl D. Bond, M.D., administrator and physician-in-chief of the Pennsylvania State Hospital and president-elect of the American Psychiatric Association, will give a special scientific talk following the luncheon.

Arrangements have been made for a "real" golf tournament over the Evansville Municipal Golf Course which has the reputation of being one of the sportiest in all Indiana. Play starts at nine o'clock in the morning and continues all day. A golfers' luncheon will be served at the course club house.

All this in itself would make up a full opening day program for any ordinary session but the Evansville session is going to be far from an ordinary affair, for in addition to all that has been mentioned above, an old-time gala Ohio River night boat ride has been planned by the entertainment committee to start at eight o'clock Wednesday evening and last—well, until the boat docks again a little before midnight. This trip is for everybody, men, women, and children, and when you get tired of the scenery there will be music, cards, and other amusements aplenty.

The general scientific meeting will be held Thursday morning and the section meetings Thursday afternoon and Friday morning. The annual banquet is scheduled for Thursday evening with Harold VanOrman, of Evansville, former lieutenant-governor, who is known throughout the nation as the best story teller in Indiana politics, as the headliner.

In addition to these attractions a special program of entertainment has been arranged by the Women's Auxiliary, under the direction of Mrs. William R. Davidson, president of the state Auxiliary, for the wives and relatives of physicians who attend the meeting. No woman should miss Dr. Arthur J. Cramp's talk on "Mrs. Gullible's Travels in Cosmetic Land." Doctor Cramp, a native Hoosier, is head of the Bureau of Investigation at the American Medical Association, and his talk, which is to be given at the Thursday morning breakfast meeting of the Auxiliary, has received national commendation.

Detailed plans have been completed for interesting, instructive and attractive scientific and commercial exhibits on the mezzanine floor of the McCurdy Hotel. The regular meetings of the House of Delegates and the Council will be held on Wednesday afternoon and Friday morning as usual.

For hotel reservations and information write to G. C. Johnson, M.D., Evansville, chairman of the General Arrangements Committee, or to Bruce H. Beeler, M.D., chairman of the Hotel Reservations Committee.

Arrangements are being made with the railroad officials for a convention rate which will be a fare-and-a-half for a round trip to Evansville on any railroad in Indiana. See the September JOURNAL for details.

The program committee announces the following papers:

The Treatment of Behavior Problems of Post Encephalitic Disease.—By Earl D. Bond, Philadelphia, Pa.

Modern Methods of Pre-operative and Post-operative Treatment in Surgical Cases.—By John Shelton Horsley, Richmond, Va.

The Diagnosis of Allergic Diseases.—By Harold S. Hatch, Indianapolis.

Medical Frauds.—By Arthur J. Cramp, American Medical Association, Chicago, Ill.

Arthritis.—By Ralph Pemberton, Philadelphia, Pa. (Lantern slides).

The Influence of Accessory Sinus Disease on General Systemic Disturbances.—By Marcus Ravdin, Evansville.

What Shall We Do for the Patient with Nervous Indigestion?—By Walter Clement Alvarez, Rochester, Minn.

Subacute Bacterial Endocarditis.—Some Clinical Observations.—By Robert M. Moore, Indianapolis.

Vomiting Problems in Children.—By Edward Clay Mitchell, Memphis, Tenn. (Lantern slides).

Hypertension in Relation to Industrial Employment.—By James O. Ritchey, Indianapolis.

The Abolition of Diabetic Coma in the United States.—By Elliott P. Joslin, Boston, Mass.

Cutaneous Tuberculosis and General Medicine.—By Francis Eugene Seneor, Chicago, Ill.

Some Psychiatric Problems in Children.—By Max A. Bahr, Indianapolis.

The Value of Fahraeus Reaction in Gynecology.—By Joseph H. Weinstein, Terre Haute.

The Management of Goiter.—By Frank H. Lahey, Boston, Mass.

The First State of Labor, a Harvest of the Preceding Sins of Omission and the Seeding of the Sins of Commission of the Second Stage.—By Henry F. Beckman, Indianapolis.

Treatment of Scirrhus Lesions of the Stomach and Duodenum.—By Eli Sherman Jones, Hammond.

Infection of the Head.—By Sumner L. Koch, Chicago, Ill.

Some Observations on the Use of Sodium Iso-Amylethyl Barbiturate.—By Leon Zerfas, Indianapolis.

Kidney Infections.—By John T. Short, Fort Wayne.

Blood Vessel Surgery—Report of Two Cases.—By James Y. Welborn, Evansville.

Subject not yet announced of paper to be read by Meyer Wiener, St. Louis.

The Treatment of Glaucoma.—By Hugh A. Kuhn, Hammond.

A Study of One Hundred Cases of Suppurative Maxillary Sinusitis.—Symptomatology, Diagnosis and Treatment.—By D. O. Kearby, Indianapolis.

INDIANA STATE BOARD OF HEALTH

Child Health Week

Winona Lake, July 15-19, 1929.

The Child Hygiene Institute conducted annually at Winona Lake was held July 15-19, 1929, by the Child Hygiene Division of the State Board of Health. The Child Hygiene staff was assisted by a local committee.

The program included examinations of children, lectures, demonstrations, motion pictures and exhibits. Exhibits were placed in a large room at the entrance gate as well as in the basement of the church.

Posters, maps and charts, dental models, literature, sample copies of *Hygeia*, and book lists were on display at the gate.

At the church attractive table displays and posters were grouped by subjects. Dental models showing defects and corrections, sun suits and other clothing, habit-training devices, maternity room set-up, shoes, food, play pen and steps, and books were shown.

At intervals health films were shown and each day a demonstration on a child health topic was given. More than 800 persons came to study exhibits and books, to see films and demonstrations. Film audiences totaled 1,500 for films shown at the Tabernacle and about 950 at the church.

During the week 141 babies and preschool children were examined.

The demonstrations of habit training, exhibit making, first aid, and food, and the discussion on the parents intelligence tests were heard by 332 persons. Lectures by Dr. Schweitzer or Dr. Lyle were given each afternoon at the Auditorium to 116. Dr. Lyle spoke to twenty-one Business and Professional Women at their annual picnic.

About forty-two persons, chiefly teachers, came to the entrance exhibit to ask questions and to talk over health projects. Many others stopped to look over exhibits while demonstrators were not present.

Many of the 200 sample copies of *Hygeia* which were donated by the American Medical Association were taken by interested persons.

On Friday a symposium on child needs was presented at the Auditorium to an audience of 116. The speakers were Revs. Gordon and Fledderjohn, Miss Drake, teacher; Mrs. Karl Gilbert, parent; Dr. Fermier, physician; Prof. Test and Miss Betty Fermier. Miss Anderson, a nurse from New Mexico, and Miss Hamnett, of Kentucky, spoke briefly concerning their work.

During the week Prof. Test brought his science class on Tuesday, Wednesday and Friday to study exhibits and demonstrations. On Tuesday afternoon the Y. W. C. A. girls from Camp Yarnelle came to see health films.

Visitors included preachers, teachers, public health nurses, parents and grandparents, business men and women, and club women from Indiana and other states. The instruction offered at the health institute was appreciated by all groups.

The local newspaper cooperation was of the greatest value in acquainting the public with the purpose and plans of the institute.

INDIANA STATE BOARD OF HEALTH

Division of Communicable Diseases

MONTHLY REPORT, JUNE, 1929

The morbidity reports sent in by the health officers of the state during the month show a marked decline, especially the principal communicable diseases, except smallpox. The name and number of diseases reported from the urban and rural population are as follows (urban including cities of 2,500 and over and rural all under 2,500 population):

Diseases	Total Reported	Urban	Rural
Tuberculosis	229	119	110
Chickenpox	223	181	42
Measles	1441	1050	391
Scarlet Fever	564	445	19
Smallpox	382	219	163
Typhoid Fever	12	9	3
Whooping Cough	166	120	46
Diphtheria	58	35	23
Influenza	29	0	29
Pneumonia	3	2	1
Mumps	10	2	8
Poliomyelitis	1	0	1
C. S. Meningitis	9	4	5
Trachoma	1	0	1
Septic Sore Throat	1	0	1

A decrease was expected for June. If it had not been for the cold, backward spring a greater decline would have been shown, especially measles, scarlet fever, whooping cough and chickenpox. These are cold weather diseases. They are house diseases. No doubt, outdoor life and sunshine (violet rays perhaps) have something to do with the prevention of these diseases.

Smallpox is always prevalent in Indiana, it seems; at least, it has been for the last seven years. Three hundred thirty-two cases were reported the previous month; 231 cases June the preceding year. The estimated expectancy was 304 cases. The estimated expectancy is based on the above mentioned period.

Measles and Scarlet Fever have been prevalent the last several months of the current year, somewhat above the normal. The estimated expectancy for the two diseases over the period was 1271 cases and 236 cases, respectively. The diseases are now due for a decline during the next three months.

Typhoid Fever shows a substantial decrease. Twenty-one cases were reported last month; 14 cases the same month last year. The estimated expectancy for June is twenty-seven cases. The greatest manifestations of this

disease is in the late summer months and early autumn. At this season of the year the people are careless in their living habits and do not take proper precaution against insects and human carriers.

Diphtheria shows a slight increase over the previous month, fifty cases being reported last month. This disease seems to be declining. It is true, however, there are fewer cases during the summer months. The estimated expectancy was ninety-three cases.

Cerebro-Spinal Meningitis shows an increase, four cases being reported in April. The nine cases reported this month from Marion, Lake and Randolph Counties, five, three and one cases, respectively. These are regarded as sporadic cases. It has been noted that the disease has been epidemic in a number of states during the past several months.

During the month the director made a survey of smallpox in Clay, Vigo and Sullivan Counties. The disease was found to have been epidemic along the entire eastern border of Sullivan County. This was due to the fact that the disease was not recognized and the physicians were not called and the health authorities not notified, so the disease ran wild. A number of cases were scattered over the county and the adjoining counties. Finally, quarantine was established, vaccination was advised and by the time the survey was made the epidemic had subsided and the few remaining sick were convalescent. It was reported that one thousand persons were vaccinated. The moral is, "Be vaccinated now; don't wait for an epidemic."

MONTHLY REPORT

JULY, 1929

The morbidity reported by the health officers of the state show a marked decline over the previous month, except typhoid fever.

A greater number of diseases are reported from the urban population (1,563,400) than the rural population (1,636,600), notwithstanding the cities are protected by their water and milk supply and insects. No doubt, the wide open country with its sunshine gives a better protection against communicable diseases than the cities with their many darkened places where the sunshine never comes, especially in the summer time.

Typhoid Fever shows an increase—nineteen cases this month and twelve cases the preceding month. The corresponding month last year nineteen cases were reported. The estimated expectancy was fifty-nine cases. The estimated expectancy is based on the experience of the last seven years, including epidemics. Typhoid time is in late summer and early autumn.

Scarlet Fever shows a marked decline. Five hundred sixty-four cases were reported in June and only one hundred sixty-six cases during the month. Corresponding month the preceding year, one hundred three cases. The estimated expectancy was one hundred seventeen cases. Scarlet fever is a late winter and early spring disease.

Diphtheria is slowly declining. Forty-four cases this month—fifty-eight cases last month. May and April, fifty cases each. Last year, same month, forty-six cases. It is true that there are not as many cases of the disease during summer months. The normal average for July is eighty-three cases.

Smallpox shows a marked decrease. The previous month three hundred eighty-two cases were reported and one hundred sixty-six cases during the month. The estimated expectancy for July is one hundred forty-six cases. The disease has been perennial in Indiana for the last several years. Permanent, it seems. Why? The answer is "vaccination".

Measles is the most prevalent communicable disease. No concerted effort is made for prevention and control. It is well reported—one thousand four hundred forty-one cases the preceding month; one hundred eighty-four cases during the month. Last year, same month, two hundred forty-seven cases. Very few cases in the summer months. It is a late winter and spring disease. Absolute

quarantine is seventy-five per cent effective.

The name and number of diseases reported during the month not mentioned above are as follows: Tuberculosis two hundred four; chickenpox, thirty-five; whooping cough, one hundred forty-nine; influenza, two; pneumonia, four; mumps, two; poliomyelitis, one; meningitis (cerebrospinal), three; Vincent's Angina (trench mouth) one; (case from Indianapolis.)

The director assisted Mrs. Helen H. Marshall, R.N., of the Vanderburgh County Tuberculosis Association and the County Council of the Parent Teacher's Association, cooperating with Dr. C. A. Hartley, County Health Officer, in conducting some educational work in reference to the control of typhoid fever. He also spoke to the members of the district 4-H Clubs, encamped in the county during the time, on health topics three different days.

H. W. McKANE, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service.

WOMAN'S AUXILIARY TO VANDERBURGH COUNTY MEDICAL SOCIETY

July 6, 1929.

About forty members of the Woman's Auxiliary of the Vanderburgh County Medical Society attended a picnic-luncheon on June 5th at the country home of Dr. and Mrs. Tweedall. Following the luncheon the president, Mrs. Ruddick, called a short business meeting, after which the afternoon was spent in an old-fashioned spelling bee and at bridge.

The next meeting will be held late in the summer, at which time plans will be made for the entertainment of the State Association meeting to be held here in September.

Respectfully,
MRS. A. E. ALLENBAUGH.

THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

The July, 1929, session of the American Medical Association in Portland, Oregon, is a happy memory to this writer because of membership in the Woman's Auxiliary with renewal of friendships and forming of new acquaintances, along with the program of entertainment prepared by the Portland women.

At the meeting of the Board of Directors of the Auxiliary, the president, Mrs. Allen H. Bunce, Atlanta, Georgia, read her report. It showed the progress of the year, the establishment of a budget, the installation of a file system, and the developments necessary in a growing organization, now numbering 13,000 members. Mrs. Bunce pleaded for correct lists of members, regretting the needless cost of verifying names and addresses. Four accurate state lists were sent in. Indiana was one of the four.

Much attention centered on the By-laws revised by Mrs. Morris Fishbein, of Chicago. Owing to her comprehensive knowledge of the Auxiliary, its aims and its place, the By-laws were adopted as read with only minor changes. In a short time, copies of these By-laws will be available to all interested.

One of these By-laws urges members to ask for an Advisory Council from their respective County Medical Society's officers and their State Association officers. Sad to relate, these appointments are sometimes withheld, when compliance with the request would safeguard the Auxiliary and the profession itself from any possible embarrassment, the very thing some physicians have feared. It is well to have on this Advisory Council men who appreciate the efforts of the Auxiliary members. For the National Auxiliary, the Advisory Council is made up of trustees of the A. M. A., Dr. Morris Fishbein, editor of the *Journal of the A. M. A.*, and Dr. Olin West, general manager of the A. M. A.

The state reports were encouraging, relating much work done, and many constructive plans for the future.

The inspiring Texas report showed the greatest cooperation existing between the medical societies and their auxiliaries. Realizing the value of the dissemination of details, the editor of the *Texas Journal*, Dr. Holman Taylor, gave sixteen pages in the June Journal to an account of auxiliary activities.

In presenting the Indiana report written by Mrs. W. R. Davidson, Mrs. F. W. Cregor added that the speaker at the September meeting will be Dr. A. J. Cramp, of the Bureau of Investigation of the A. M. A., whose subject will be "Mrs. Gullible's Travels in Cosmetic Land." Many women jotted down this bit of information.

Mrs. G. Henry Mundt, organizer and first president of the Illinois Auxiliary, spoke at length of economic conditions in medical circles which are reflected in the home. To quote her reply to a plea made for funds for a welfare center: "Why should I take money from my husband's pocket in order to take more money from his pocket!"

The report of the Woman's Auxiliary to the American Medical Association of Vienna, Austria, prepared by Mrs. William S. Tomlin, of Indianapolis, and read by Mrs. Cregor, elicited applause. Mrs. Fishbein was delegated to cable "greetings" to Vienna from the members of the Woman's Auxiliary to the A. M. A. in meeting assembled.

Other interesting reports on organization, health education, hygiene, public relations, were given. It is regretted that the budget will not permit of a bulletin with excerpts from these reports and an account of the Portland session. Fortunate was the Auxiliary last year when the Pennsylvania women contributed \$500 for a bulletin, and the year before when the Texas Auxiliary financed an elaborate journal. The Press and Publicity Committee will attempt to disseminate this and other information through the state journals, which brings us to the question: How many women read the journals? The necessity for self-instruction via editorials in the journals is too apparent for comment. The complaint, "We never see the journals" was met by the suggestion, "Get your state editor to mail the journal to the home rather than the office!" The incoming president, Mrs. George H. Hoxie, of Kansas City, Missouri, stresses health-education, and what better source of information than the state journals!

As is the custom, an excellent one, the president and president-elect of the A. M. A. addressed the women at the general meeting. Dr. William S. Thayer spoke of the mistaken activities of many well-meaning people in their efforts to prevent animal experimentation—the so-called antivivisectionists. Dr. Thayer prefers the term "animal experimentation" to "vivisection" with its connotation. He also congratulated the Auxiliary for its efforts to bring *Hygeia* before the public. Dr. M. L. Harris spoke of the need of the education of the young in correct medical practices to overcome superstitions and prejudices against regular medicine.

The officers elected for 1929-30 include Mrs. J. N. Hunsberger, Norristown, Pennsylvania, president-elect; Mrs. F. W. Cregor, Indianapolis, first vice-president; Mrs. David W. Parker, Manchester, New Hampshire, second vice-president; Mrs. B. F. Davis, Duluth, Minnesota, third vice-president; Mrs. Irvin Abell, Louisville, Kentucky, fourth vice-president.

According to the new By-laws, the first vice-president shall be chairman of organization, with the other vice-presidents equally responsible for organization in territory assigned to them. It is the earnest wish of this chairman of organization that Indiana make an *extraordinary* showing in new members.

Respectfully submitted,

MRS. F. W. CREGOR.

THE WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

Mrs. Homer G. Hamer, Indianapolis; Mrs. Ernest L. Mattox, Terre Haute, and Mrs. D. R. Ulmer, Terre Haute, were delegates from the Woman's Auxiliary to the Indiana State Medical Association to the annual session of the Woman's Auxiliary to the American Medical Association in Portland, Oregon.

CORRESPONDENCE

CORRECTION

July 25, 1929.

To the Editor:

In my article on "Undulant Fever" in the issue of THE JOURNAL of June 15th, 1929, I made the statement on page 275, viz: "while we may assume that there are many good laboratories in the state of Indiana, only four have been recognized as fulfilling certain requirements: of these one is in the capital city, Indianapolis, the other three respectively are in Lafayette (Purdue University), Fort Wayne and South Bend."

First—I omitted to state that recognition of these four laboratories comes from the American Medical Association.

Second—I identified the American Medical Association approved laboratory of Lafayette with Purdue University which is incorrect.

The Bacteriological laboratory in Lafayette approved by the American Medical Association as one of the four so approved in the state of Indiana is the laboratory of Dr. Frank P. Hunter, whose address is 719 South street, Lafayette, Ind. In mentioning Purdue University I showed ignorance in not crediting Doctor Hunter, who is not associated with Purdue University.

Incidentally if there are other laboratories in Indiana now recognized and approved by our national association and not mentioned in my article on "Undulant Fever," I should be pleased to know of them so that I may give them the credit they deserve.

Yours respectfully,

J. B. BERTELING, M.D.

THE ELECTROCARDIOGRAPH

Indianapolis, July 10, 1929.

Editor THE JOURNAL:

I was very much interested in seeing your editorial regarding the electrocardiograph in the last issue of the JOURNAL. I always had concurred in this opinion and I am glad to see it expressed. I saw very early in the course of my work that it could be used as a spectacular and impressive diagnostic procedure from the standpoint of the patient, in which case its use might be exploited. Therefore, I have considered that it is simply another means of diagnosis to add to the other things we have in hand. I might say that in my own private patients I do not find its use indicated in more than one-half of those I see, because I have come to know in which cases it will show something. On the other hand, that it is invaluable at some times is beyond dispute.

Very truly yours,

GEORGE S. BOND.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Any information concerning these books will be supplied on request.

Books received since July 1, 1929:

THE SURGICAL CLINICS OF NORTH AMERICA (New York Number). Issued serially, one number every other month. Volume 9, number 3. June, 1929. 299 pages with 125 illustrations. Per clinic year, February, 1929, to December, 1929, paper \$12.00, cloth \$16.00. W. B.

Saunders Company, Philadelphia and London, 1929.

GYNECOLOGY: A TEXTBOOK OF THE DISEASES OF WOMEN. By Lynn L. Fulkerson, A.B., M.D., F.A.C.S., Instructor in Obstetrics and Gynecology, Cornell University Medical School, etc. 612 illustrations, 842 pages. Cloth. Price \$9.00. P. Blakiston's Son & Company, Philadelphia, 1929.

THE CLINICAL ASPECTS OF VENOUS PRESSURE. By J. A. E. Eyster, B.Sc., M.D., Professor of Physiology, University of Wisconsin, Associate Physician, Wisconsin General Hospital, Madison, Wisconsin. 135 pages. Cloth. Price \$2.50. The MacMillan Company, New York, 1929.

YOUR NOSE, THROAT AND EARS: THEIR HEALTH AND CARE. By L. W. Oaks, M.D., and H. G. Merrill, M.D. 167 pages. Cloth. Price \$1.50. D. Appleton & Company, New York and London, 1929.

THE CHALLENGE OF CHRONIC DISEASES. By Ernst P. Boas, M.D., attending physician, Montefiore Hospital for Chronic Diseases, and Nicholas Michelson, M.D., adjunct physician, Montefiore Hospital. 197 pages. Cloth. Price \$2.50. The MacMillan Company, New York, 1929.

PHYSICAL EXAMINATION AND DIAGNOSTIC ANATOMY (Fourth edition). By Charles B. Slade, M.D., formerly chief of Clinic in General Medicine, University and Bellevue Hospital Medical School, New York. Fourth edition, thoroughly revised. 196 pages with 43 illustrations. Cloth. Price \$2.00. W. B. Saunders Company, Philadelphia and London, 1929.

AMERICAN ILLUSTRATED MEDICAL DICTIONARY. A complete dictionary of the terms used in medicine, surgery, dentistry, pharmacy, chemistry, nursing, veterinary medicine, biology, medical biography, etc. By W. A. Newman Dorland, M.D., member of the Committee on Nomenclature and Classification of Diseases of the American Medical Association. Fifteenth edition, revised and enlarged. Octavo of 1427 pages, 525 illustrations, 107 in color. Flexible binding. Plain \$7.00. With thumb index, \$7.50. W. B. Saunders Company, Philadelphia and London, 1929.

BOOK REVIEWS—

PRINCIPLES AND PRACTICE OF ELECTRO-CARDIOGRAPHY. By Carl J. Wiggers, M.D., Professor of Physiology, Western Reserve School of Medicine, Cleveland, Ohio; 226 pages and 61 illustrations. Cloth. Price \$7.50. C. V. Mosby Co., St. Louis, Missouri, 1929.

Improvements over the Einthoven galvanometer have made practical and available modern electro-cardiography to the medical profession. The importance of this procedure is so thoroughly established that every medical man should make himself familiar with it. Unfortunately because of the newness of this subject only a very few are now familiar with its principles and practice. It is necessary, therefore, that every up-to-date physician should give himself a course of self training to familiarize himself with this important advance in the study of the heart. Dr. Wiggers' book gives a simple yet comprehensive presentation of the subject of electrocardiography and, therefore, should meet this popular demand for a working knowledge of the subject. The book is divided into three sections. The first deals with the principles and procedures in making an electrocardiogram. The second and third sections are of more value to the practitioner. The second deals with the relation of the curves of the normal electrocardiogram to the physical and physiologic processes of the heart, while the third section considers abnormal electrocardiograms, points out the abnormal deviations and discusses their significance in diagnosis and treatment. The work is recommended heartily to every practitioner of medicine.

BLOOD AND URINE CHEMISTRY. By R. B. H. Gradwohl, M.D., Gradwohl Laboratories, St. Louis, Mo., and Ida E. Gradwohl, Gradwohl School of Laboratory

color plates. Cloth. Price \$10.00. C. V. Mosby Co., St. Louis, Mo., 1928.

The elementary manner in which this book is written indicates that it is especially for students, technicians and practitioners of medicine. It is regrettable that there is a congestion of mediocre works on laboratory medicine. The first parts of this book are devoted to routine analysis but without including the basic principles. The third and fourth sections are devoted to blood chemistry and basal metabolism, and are in large part quoted from other authorities.

CLINICAL LABORATORY METHODS. By Russel L. Haden, M.D., Professor of Experimental Medicine, University of Kansas, School of Medicine, Kansas City, Mo.; 317 Technique; 554 pages with 117 illustrations and four pages with 69 illustrations and four color plates, third edition. Cloth. Price \$5.00. C. V. Mosby Co., St. Louis, Mo., 1929.

This is one of several excellent books on laboratory technique. Now in its third edition, having been brought up to date by omitting obsolete tests and adding valuable new ones such as Exton's Albuminometer, the Kahn test for syphilis and the adoption of the Kolmer Wassermann test as the standard test for syphilis. This book will undoubtedly continue to have a valuable place in the laboratory library.

HANDBOOK OF PHYSIOLOGY. By W. D. Halliburton, M.D., LL.D., F.R.C.P., F.R.S., emeritus professor of physiology, King's College, London, and R. J. McDowall, M.D., D.Sc., F.R.C.P., dean of the faculty of medicine and professor of physiology, King's College, London. Eighteenth edition, 902 pages with more than 500 illustrations. Cloth. Price \$4.75. P. Blakiston's Son & Company, Philadelphia, 1929.

This is an English work now in its eighteenth edition, which, of course, speaks for its excellence. It is scarcely necessary to comment on the excellence of this work, as its popularity is established. It is interesting to note that the first edition appeared in 1848 as "Kirk's Physiology," a work that at that time received great favor, and a favor that has continued through successive editions with changing editors with the passing of time. The present edition shows for the first time the addition of Professor McDowall's name as a collaborator, and he is responsible for much of the new material that has been incorporated in the new edition. Much of the book has been rewritten and much additional matter added. Essential anatomy and physiological histology have been retained, and principles emphasized. The work has been thoroughly brought up to date in every particular.

THE TECHNIC OF LOCAL ANESTHESIA. By Arthur E. Hertzler, A.M., M.D., Ph.D., LL.D., F.A.C.S., Professor of Surgery in the University of Kansas, etc. Fourth edition; 284 pages with 146 illustrations. Cloth. Price \$6.00. The C. V. Mosby Company, St. Louis, 1928.

As in previous editions this fourth edition presents the indications for the use of local anesthesia and the technic which the author has found most useful in obtaining the desired end. He very properly says that experience and skill are acquired for the best result, but also important is a realization of the indications as well as contra-indications for *general* anesthesia, for while it is generally known that any operation can be done under local anesthesia, yet there are those conditions in which general anesthesia should be the anesthesia of choice. It is the proper selection of method that marks the skilled surgeon and not his ability to do certain things with local anesthesia. The book is a safeguard, and the subject matter admirably presented. The illustrations are excellent, and the publisher's work has been well done.

TUBERCULOSIS AND HOW TO COMBAT IT. By Francis M. Pottenger, A.M., M.D., LL.D., F.A.C.P. A book for the patient. Second edition, 275 pages. Cloth Price \$2.00 The C. V. Mosby Company, St. Louis, 1928.

This book is intended for patients but may be read with profit by physicians. It gives information regarding tuberculosis and its cure as based upon the author's experience as well as the experience of many others engaged in tuberculosis work. It is an inquiry and answer to inquiries made by patients such as (1) simple truths about the disease, (2) the mode of action and reason for using the common measures which have proved of value in treatment, (3) a discussion of the common symptoms which are a source of concern and worry to patients, (4) weather conditions and ways of adapting oneself to the various changes, (5) the patient's part in cure, (6) the environment in which treatment is to be carried out, (7) measures for the prevention of the spread of infection, and (8) the problems in which the patients are particularly interested. The book, the author says, is not intended to take the place of a physician but is offered as an aid and supplement to his instructions and make both his and the patient's task easier.

HISTORY OF MEDICINE. By Fielding H. Garrison, M.D., Lt. Colonel, Medical Corps, U. S. Army. Fourth edition, revised and enlarged, 996 pages, with 286 portraits and other illustrations. W. B. Saunders Company, Philadelphia and London, 1929. Cloth. Price \$12.00.

We have had occasion to comment favorably upon previous editions of this interesting work which in its present fourth edition has been brought up to date and contains much new material found necessary as a result of the late war and conditions since then. The book is a well-written and interesting story of the progress of medicine through all of its vicissitudes and changes due to the ups and downs of civilization. It is a book worthy of a place in any man's library, and its author, connected as he is with the surgeon general's office in Washington, has had the advantage of wonderful facilities for the preparation of a work that is practical in conception and execution.

PHYSICAL DIAGNOSIS. By W. D. Rose, M.D., Associate Professor of Medicine in the University of Arkansas, Little Rock, Arkansas. Fifth edition, 819 pages, with 310 illustrations and three color plates. Cloth. Price \$10.00. The C. V. Mosby Company, St. Louis, 1927.

This book has now gone through five editions. It has been written for the medical student and busy practitioner and gives the principles of physical diagnosis together with the physical findings in the commoner diseases of the respiratory and circulatory systems. Anatomy and physiology are considered from a clinical standpoint. The diagnostic signs referable to the head, neck and limbs, together with a minimum examination of the nervous system, are considered. Illustrations are valuable in elucidating the text. This last or fifth edition represents an entire revision, and in many chapters a rewriting of the subject. Especial attention has been given the pathologic cent advances in the technic of physical examination. Many of the illustrations are new and obsolete ones have been omitted.

NEUROLOGICAL EXAMINATION. By Charles A. McKendree, M.D., Associate, Department of Neurology, College of Physicians and Surgeons, Columbia University. Foreword by Henry Alsop Riley, M.D., 280 pages with 88 illustrations. Cloth. Price \$3.25. W. B. Saunders Company, Philadelphia and London, 1928.

This book should prove valuable to instructors who no doubt will recommend it to students. The purpose of the book is to familiarize the medical student with intricate postgraduate medical examination, with a comprehensive form of systematic form of examination of the central nervous system. The author clearly states that an attempt has been made not only to describe the various tests but also to make it clear why such tests are applied and to correlate abnormal findings with the symptoms. He has accomplished the purpose in its entirety.

THE CLIMACTERIC. By Gregorio Maranon, Professor of Medical Pathology in the Madrid General Hospital. Translated by K. S. Stevens and edited by Carey Culbertson, A.B., M.D., F.A.C.S., 425 pages. Cloth. Price \$6.50. The C V. Mosby Company, St. Louis, 1929.

This is a translation of a Spanish work that has been received with much favor. Problems of the menopause come up every day in the professional work of every physician. The author has studied the subject clinically, and as far as possible experimentally. He takes the stand that the menopause is not merely a syndrome of genital insufficiency, as was thought until recently, but is the biologic consequence of a complex and constant endocrine crisis, like that of puberty, the glandular elements of which can be made out with some claim to exactness. The work contains a consideration of sexual psychology, aside from the purely gynecologic and medical matters. After discussing the various symptoms and manifestations, both physical and psychic, the author devotes two chapters to the treatment of the climacteric symptoms and conditions.

ANNUAL REPRINT OF THE REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION FOR 1928. Cloth, Price, postpaid, \$1.00. Pp. 75. Chicago: American Medical Association, 1929.

This book is a great deal more than a mere record of the negative actions of the Council on Pharmacy and Chemistry. It gives in full the reasons for the Council's rejection of various preparations, but it also records results of the Council's investigations of new medicinal agents not yet out of the experimental stage, and frequently contains reports on general questions concerned with the advance of rational drug therapy. All three categories of reports are represented in the present volume.

Among the reports on products that have been denied admission to New and Nonofficial Remedies are those on Sanarthrit and Telatuten, two preparations of animal tissue, of indefinite composition, proposed for use in arthritis and arteriosclerosis respectively; on Clauden, a combination of lipoids and undefined proteins, proposed for use as a hemostatic; on Hart's Ailmentary Elixir of Beef, a liquid medicinal food, "fortified" with glycerophosphates; on Alucol, claimed to be colloidal aluminum hydroxide and marketed under this nondescriptive name; on Oxo-Ate and Oxo-Ate B, claimed to be the ammonium and calcium salts, respectively, of orthoiodoxbenzene acid and marketed under these proprietary, nondescriptive names; on Terpezone, stated to be pinene ozonide and marketed with exaggerated and unwarranted claims; on Vitalipon, an unscientific and indefinite mixture of lipoids claimed to be extracted from "vegetable and animal embryonic organs"; on Kalak Water, a solution containing sodium bicarbonate with many other ingredients and questionable utility, marketed under a nondescriptive name with unwarranted therapeutic claims; on Eu-Med, Aerosan Tablets, and Thyangol Pastilles, three shotgun mixtures from Germany.

Among the preliminary reports are those on Metrazol, which has now been admitted to New and Nonofficial

Remedies; on Phenylaminoethanol sulphate, a newly synthesized ephedrine substitute; on Ovarialhormon Folliculin Menformon, the ovarian preparation originated by Dr. Laqueur of Amsterdam; and on Heparhone, a liver preparation.

The special report dealing with dextrose solutions containing cresol and intended for intravenous administration is a noteworthy example of the third category of Council reports we have mentioned.

NEW AND NONOFFICIAL REMEDIES, 1929, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1929. Cloth. Price, postpaid, \$1.50. Ph. 488; xlviii. Chicago: American Medical Association.

This book offers a solution to the problem of the busy physician who is daily importuned by "detail" men to try the thousand and one new preparations brought out by enterprising manufacturers of pharmaceuticals. If the preparation in question is not described in *New and Nonofficial Remedies*, it is quite safe to refuse to try it no matter how alluring the salesman's talk. The book contains descriptions of those new preparations which, after painstaking examination, the Council on Pharmacy and Chemistry has found worthy of recognition and of trial by the medical profession. It is revised each year to bring it up to date with the best medical thought and to include the new preparations that have been recognized during the year as well as to delete those which have been found not to live up to their promise of therapeutic value.

In this edition there appears for the first time an article on liver preparations and their therapeutic use. The articles on ergot, metallic peroxides, pituitary gland, and radium and radium salts have been considerably revised. Among the new preparations which have been included in this edition are: diphtheria toxoid, which is the toxin of diphtheria so modified by treatment with formaldehyde as greatly to reduce its toxicity yet preserving its antitoxic power; metrazol, another proposed substitute for camphor; liver extract no. 343 and concentrated liver extract-Armour, for the treatment of pernicious anemia. Other newly accepted articles are: bismuth sodium tartrate-Searle, another water soluble bismuth tartrate preparation; scarlet fever toxin-P. D. & Co., another scarlet fever toxin manufactured under lease of the Scarlet Fever Commission; parathyroid hormone-Squibb, standardized by the method of J. B. Collip, and paroidin, made and standardized by the method of A. M. Hanson, both being solutions of the active principle or principles of parathyroid gland for appropriate clinical use. An important deletion is the omission of all generators charged with radium.

A new departure in this edition is a list of "exempted" articles. This comprises some hundred and thirty medicinal and non-medicinal products examined by the Council and found to be of such composition and to be so marked as not to require acceptance or rejection by the Council under its rules.

A section of the book (brought up to date each year) gives references to proprietary articles not included in *New and Nonofficial Remedies*. This list, in conjunction with the book proper constitutes a cumulative index of proprietary medicines, which physicians may consult when a proprietary product is brought to their attention. Physicians cannot dispense with the use of the newer remedies that are brought out each year; yet they can neither judge them on the basis of the manufacturers' claims nor have they the time or means to determine their merits for themselves. For this reason, every physician should possess a copy of this volume, which annually puts at his disposal an authoritative up-to-date, and unbiased estimate of these preparations.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

INSULIN-SQUIBB, 80 UNITS, 10 CC.—Each cc. contains insulin-Squibb (New and Nonofficial Remedies, 1929, p. 197) 80 units. E. R. Squibb & Sons, New York.

DIPHThERIA TOXOID.—A diphtheria toxoid (New and Nonofficial Remedies, 1929, p. 368) prepared from diphtheria toxin of which the L+ dose is 0.25 cc. The toxin is treated with formaldehyde according to the specifications of the U. S. Public Health Service until it is detoxified. It is tested for antigenic power by subcutaneous injection into guinea-pigs. Diphtheria toxoid-P. D. & Co. is marketed in packages containing one bulb (0.5 cc.) of dilute diphtheria toxoid for the reaction test and two bulbs (0.5 and 1.0 cc., respectively) of diphtheria toxoid; also marketed in hospital packages. Parke, Davis & Co., Detroit.

PETROLAGAR (WITH MILK OF MAGNESIA).—Liquid petrolatum (New and Nonofficial Remedies, 1929, p. 228) 65 cc.; magnesia magma, 8 cc.; emulsified with agar in a menstruum containing sugar, flavoring, sodium benzoate 0.1 Gm., and water to make 100 cc. Petrolagar Laboratories, Inc., Chicago.—(*Jour. A. M. A.*, June 1, 1929, p. 1837).

BISMARSEN. — SULPHARSPHENAMINE BISMUTH. — BISMUTH ARSPHENAMINE SULPHONATE.—The sodium salt of a bismuth derivative of arspenamine methylene sulphonic acid with inorganic salts. It contains approximately thirteen percent of arsenic and twenty-four percent of bismuth. Bismarsen is used in the treatment of syphilis. The drug is reported to be somewhat slower in its action than intramuscularly administered sulpharsphenamine or intravenously administered neoarsphenamine, but much more rapid than bismuth. More or less severe pains at the site of injection have been reported. Bismarsen is administered intramuscularly. Abbott Laboratories, North Chicago, Illinois.—(*Jour. A. M. A.*, June 8, 1929, p. 1928).

DIGIFOLINE-CIBA.—A digitalis preparation containing the active glucosides of digitalis, free from extractive matter. It is standardized to have the strength of digitalis leaves as standardized by the frog method of Focke. The actions and uses of Digifoline-Ciba are the same as those of digitalis. It may be administered orally, rectally, or by subcutaneous, intramuscular or intravenous injection. Digifoline-Ciba is marketed in the form of Ampules Digifoline-Ciba Solution, Digifoline-Ciba Liquid and Tablets Digifoline-Ciba. Ciba Company, Inc., New York.

CONCENTRATED POLLEN EXTRACTS-SWAN-MYERS.—In addition to the products listed in *New and Nonofficial Remedies*, 1929, p. 26, the following product has been accepted: Canada Blue Grass Concentrated Pollen Extract-Swan-Myers. Swan-Myers Co., Indianapolis.

SULPHARSPHENAMINE-SEARLE, 0.1 GM. AMPULES.—Each ampule contains sulpharsphenamine-Searle (*The Journal*, April 20, 1929, p. 1349) 0.1 Gm. G. D. Searle & Co., Chicago.

SULPHARSPHENAMINE-SEARLE, 0.2 GM. AMPULES.—Each ampule contains sulpharsphenamine-Searle (*The Journal*, April 20, 1929, p. 1349) 0.2 Gm. G. D. Searle & Co., Chicago.

SULPHARSPHENAMINE-SEARLE, 0.3 GM. AMPULES.—Each ampule contains sulpharsphenamine-Searle (*The Journal*, April 20, 1929, p. 1349) 0.3 Gm. G. D. Searle & Co., Chicago.—(*Jour. A. M. A.*, June 15, 1929, p. 2021).

AMPULES LUMINAL-SODIUM (POWDER), 2 GRAINS.—Each ampule contains 2 grains of luminal-sodium (New and Nonofficial Remedies, 1929, p. 81).—(*Jour. A. M. A.*, June 22, 1929, p. 2101).

PROPAGANDA FOR REFORM

CORAMINE-CIBA.—The Council on Pharmacy and Chemistry publishes a preliminary report on Coramine-Ciba. The product is stated to be pyridine-carbonic acid diethylamide, proposed for use as a circulatory stimulus in cardiac failure, surgical shock, narcotic poisoning and respiratory failure. The product is marketed as Coramine Liquid, a 25 percent solution for oral, subcutaneous, intramuscular and intravenous administration. The A. M. A. Chemical Laboratory confirmed in a general way the chemical claims. Eleven reprints were submitted by the Ciba Co., Inc., in support of the claims made; four of these referred to animal experiments, six to clinical results and one to both. In addition, the Council's referee examined a number of reports not submitted by the firm and reported the tenor of all to be favorable. The experiments on animals are not impressive, in view of the very large doses used to produce effects in animals. It is probable, however, that with a drug of this character observations on man would be most convincing, if they could be controlled thoroughly so as to exclude spontaneous changes. It is doubtful whether this is the case in the present instance, and while the clinical reports are generally favorable, they are not decisive. The Council voted to postpone action on Coramine-Ciba to await further experimental and clinical evidence which may establish its usefulness and to publish its report bringing out the experimental status of the product.—(*Jour. A. M. A.*, June 1, 1929, p. 1837).

ELIXIR KACYAN MCNEIL AND TABLETS KACYAN MCNEIL NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that it decided not to admit potassium sulphocyanate to New and Nonofficial Remedies because the evidence for its therapeutic value is inconclusive. However, in view of reports in which reduction in pressure is clinically desirable, the Council holds that further consideration should be given the drug and voted to publish this report, stating the limitations of therapy with potassium sulphocyanate, namely, that the evidence for its value is far from conclusive; that in many patients the production of lowered pressure does more harm than good; and that its use is contra-indicated in acute inflammation of all types, in nephritis and in marked renal insufficiency. The Council also reports that Elixir Kacyan McNeil and Tablets Kacyan McNeil are the proprietary names under which Robert McNeil, Philadelphia, markets an elixir and tablets of potassium sulphocyanate and that these are unacceptable for New and Nonofficial Remedies because the evidence for the value of potassium sulphocyanate is inconclusive and because the marketing of this drug under a proprietary name is contrary to the interests of rational therapy.—(*Jour. A. M. A.*, June 1, 1929, p. 1838).

THALLIUM POISONING.—Three children died recently in London from poisoning by thallium acetate administered for ringworm of the scalp. This is an additional indication of the growing importance of thallium compounds as a dangerous poison. The first therapeutic use of thallium was to check sweating. Its action in causing a loosening and falling out of the hair was a "by-product" and most of our information about its other and more general poisonous effects in man has been obtained from its employment in epilation. Thallium is closely related chemically to mercury and lead. Although they appear earlier, the symptoms of chronic thallium poisoning are more like those produced by arsenic than by these other metals.—(*Jour. A. M. A.*, June 1, 1929, p. 1865).

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture, which enforces the Federal Food and Drugs Act: Musser's Injection R 500 (Musser-Reese Chemical Co.), consisting essentially of boric acid and zinc sulphate in water. Sen-Gen-Ma (Nature Herb Co., Inc.), consisting essentially of a mixture of

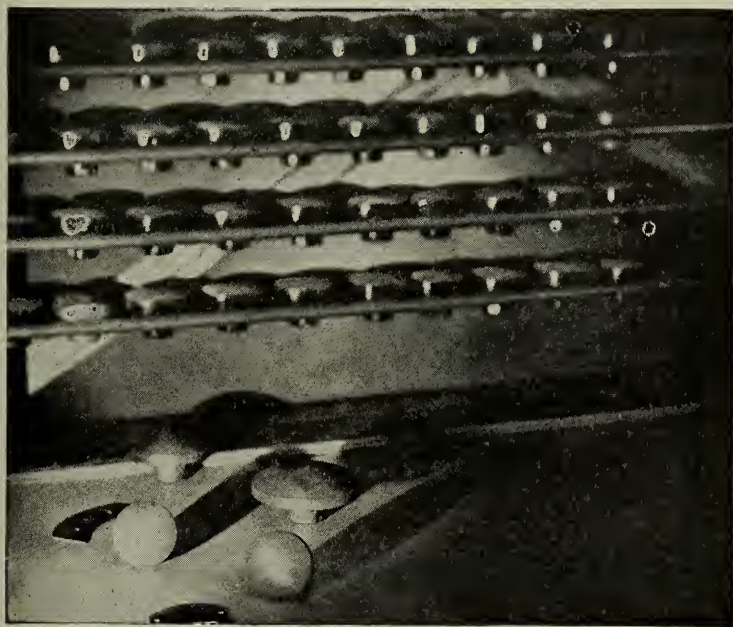
ground plant drugs, including senna, cascara and gentian, with baking soda. Sal-Normal (Physio-Chemical Laboratories, Inc.), consisting essentially of compounds of sodium, potassium, calcium and magnesium, including phosphates and carbonates and citric acid flavored with lemon oil. Neovigor Tablets (North American Drug Co.), consisting essentially of sugar-coated pills containing chromium sulphate and phenolphthalein. Mentho-Kreoamo (Mentho-Kreoamo Co.), consisting essentially of ammonium chloride, wood tar, creosote, a trace of menthol, sugar and water. California Fig-Nuts Agar (West Side Warehouse, Chicago), consisting of baked and crumbled cereal product containing bran, wheat and traces of figs, nuts and agar. An-A-Cin (An-A-Cin Co.), consisting essentially of acetphenetidin and acetylsalicylic acid with small amounts of quinine sulphate and caffeine. Prescription 999 Astringent Wash (Combination Remedy Co.), consisting essentially of boric acid and epsom salt.—(*Jour. A. M. A.*, June 1, 1929, p. 1880).

IRRADIATED ERGOSTEROL.—Lest there still remain any misunderstanding, it should be recalled that the therapeutic virtues of cod liver oil are by no means to be identified with irradiated ergosterol, for the liver oil is rich in vitamin A, which is in no way identical with the antirachitic properties of the irradiated ergosterol. The publicly announced statements that solutions of irradiated ergosterol represent the long desired "synthetic cod liver oil" are utterly misleading except as the vitamin D component is concerned. Irradiated ergosterol cannot replace butter—a common source of vitamin A—though it may supplement the valuable milk fat. When a highly potent substance such as irradiated ergosterol becomes readily available, it behooves us to consider carefully whether a danger of overdosage exists. While there appears to be a liberal range between a physiologically beneficent intake and a possibly injurious overdosage, there can no longer be much doubt that massive doses of irradiated ergosterol may result in considerable impairment of nutrition, loss of weight, pronounced hypercalcemia, and abnormal calcium deposits in certain tissues and organs. Investigators in the U. S. Public Health Service state that irradiated ergosterol is no doubt a useful drug and one endowed with great potency, but not without possible harm in the hands of the unsuspecting. Probably this is true also, the investigators add, of the haphazard consumption of foodstuffs that have been subjected to the action of ultraviolet rays.—(*Jour. A. M. A.*, June 15, 1929, p. 2023).

YEAST AND PUFFERY.—The *British Medical Journal* has called attention to some "highly objectionable advertisements of proprietary brands of yeast" that were appearing in American and Canadian periodicals. These advertisements are stated to have been of the testimonial type and purported to be signed by European or American medical men. While not mentioned by name, it seems quite obvious that the *British Medical Journal* referred to the blatant series of advertisements that the "Fleischmann's Yeast" concern has been running recently. As a result of the editorial comment, a well-known London physician has written to the *British Medical Journal* that he was asked to write a testimonial extolling the virtues of yeast, this testimonial to appear with his name and photograph in magazines and newspapers, and was offered the sum of one hundred fifty pounds (\$750). The physician did not accept the offer of the advertising agent. The following American physicians' names (and pictures) have been used by the Fleischmann people in their recent advertising campaign: "Dean H. H. Rusby, M.D., Professor of Physiology, College of Pharmacy, Columbia University; "Dr. George Parrish, well-known health officer of Los Angeles"; "Dr. Ira L. Hill, prominent New York physician and abdominal surgeon."—(*Jour. A. M. A.*, June 15, 1929, p. 2025).

PHARMACEUTICAL PREPARATIONS OF EPHEDRA NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy


Out of Tillyer tool precision... comes Tillyer better vision



For Tillyer work, Rx shops use special tools,
for Tillyer work only.

TILLYER LENSES

accurate to the very edge.

TILLYER grinding tools are the result of computations that have corrected ophthalmic lenses within the narrowest limits ever established, for both astigmatism and power. They are not a meaningless gesture. They are the only means by which a lens of sufficient merit to constitute a real improvement can be made. When you order Tillyer Lenses on Rx, more tools, better tools, new tools, and more accurate tools go to work for you. Four additional tests and testing devices assure precision. Special non-elastic polishing is done. It is hardly necessary to add that, out of this precision, comes greater clarity and comfort—Tillyer vision! 

AMERICAN OPTICAL COMPANY

TRUTH ABOUT MEDICINES

(Continued from page 348)

and Chemistry points out that during recent years much attention has been given to the alkaloid ephedrine and that the free base, ephedrine, and two salts, ephedrine hydrochloride and ephedrine sulphate, have been admitted to New and Nonofficial Remedies. Further, that the alkaloid ephedrine is one of the alkaloids contained in the drug ephedra (*Ephedra equisetina, ma huang*), which contains also an indefinite and variable mixture of bases related to ephedrine but differing quantitatively and possibly qualitatively in their actions. A chemical assay of pharmaceutical preparations of ephedra has, therefore, no value as a measure of their therapeutic potency, having no bearing on therapeutic activity. The Council holds the use of unstandardized preparations of a potent drug to be a step backward, and is distinctly undesirable when standardized preparations (in this case the isolated alkaloid ephedrine and its salts) are practically available. The Council, therefore, decided that pharmaceutical preparations of ephedra must be considered unacceptable until their therapeutic value in comparison to ephedrine has been established.—(*Jour. A. M. A.*, June 22, 1929, p. 2101).

ALLERGY IN RHEUMATIC FEVER.—Recently J. C. Small isolated a nonhemolytic streptococcus from the blood and various other tissues and fluids of patients with rheumatic fever. He considers this a specific organism and named it *Streptococcus cardioarthritidis*. Vaccines and serums prepared with this organism have received a limited amount of study in the treatment of acute rheumatic fever. Against the specific nature of this organism there is, however, a not inconsiderable mass of evidence. In addition to the evidence that questions the specificity of the rheumatic fever of the organ-

ism claimed to be the cause of rheumatic fever, work has been done which points to an allergic factor as being the cause of the disease. The problem of etiology in rheumatic fever is complicated; a study of treatment yields largely futility and despair.—(*Jour. A. M. A.*, June 22, 1929, p. 2102).

FAYRO, ANOTHER QUACK OBESITY CURE OF THE BATH SALT TYPE.—It is learned that the Federal Trade Commission has issued a complaint against the Fayro Laboratories, Inc., a Delaware corporation, doing business from Pittsburgh, and engaged in the manufacture, advertising and selling of an alleged cure for obesity. The advertising of the firm asserts that weight reduction may be secured by means of baths. The Federal Trade Commission in its complaint sets out eighteen indictments against this humbug, each one answering claims that are, or have been, made for Fayro. The last sums up the case against this mixture of epsom and common salt thus: 18. Fayro is an unsafe, unscientific, ineffective and undependable nostrum and will not remove fat or flesh from the human body.—(*Jour. A. M. A.*, June 22, 1929, p. 2121).

SODIUM BICARBONATE AND CALCIUM CARBONATE FOR ALKALIZATION OF URINE.—Both sodium bicarbonate and calcium carbonate are effective antacids as far as the gastric secretion is concerned. However, sodium bicarbonate is much more efficient in aiding in the alkalization of the urine than calcium carbonate. The reason for the difference lies in the fact that sodium salts, such as bicarbonate, are freely absorbed by the intestine. On the other hand, calcium carbonate itself is not susceptible of absorption. Sodium bicarbonate may be freely used to the extent of actual alkalization of the urine, though it may take as much as 30 Gm. or more. (*Journal of the A. M. A.*, March 9, 1929, p. 831).



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ORIGINAL ARTICLES

ROENTGENOGRAM DIAGNOSIS OF ADVANCED ABDOMINAL PREGNANCY

A. M. MENDENHALL, M.D.
INDIANAPOLIS

To those who have had no experience in the diagnosis of advanced abdominal pregnancy it might seem that such a diagnosis should not be difficult. True indeed there are cases of advanced abdominal pregnancy in which but little difficulty should arise in arriving at the correct diagnosis, but where one such case is seen there will be many which tax the expert diagnostician's capacity very seriously. In fact there are many such cases where the diagnosis cannot be made until the cervix has been artificially dilated sufficiently to permit exploration of the interior of the uterine cavity or until the abdomen has been opened.

Many suggestions have been offered as aids in diagnosis but none yet have proven quite satisfactory. It has been said that direct palpation of the abdomen often reveals the fetal parts too superficial to be in the uterus. This procedure very often fails. The writer has seen many cases in which a thin abdomen and a thin uterine wall caused the examiner to make a diagnosis of abdominal pregnancy when the fetus was in the uterus. Likewise many abdominal pregnancy cases are so tender and rigid that no fetal parts can be felt at all. The writer further knows of three cases, each of which had the uterus explored with a sound, and then had a hydrostatic bag introduced in the cervix before the correct diagnosis of abdominal pregnancy was made.

To be sure, we have many procedures which often help toward a correct diagnosis, but in view of the many failures, a method came to my mind which I believe has not been used before, and which I am quite sure should be of great help, and that is the roentgenogram after the injection into the uterine cavity of a radio-opaque substance such as iodized oil. Merely taking a roentgenogram without such an injection is usually a total failure as an aid, further than to show the presence of a fetus. In six cases coming to my attention the roentgen ray merely showed fetal parts surrounded by a wall or sac which contained

fluid, but this wall could either be the uterine wall or the false sac of abdominal pregnancy. The roentgen ray without uterine injection did not prove that the fetus was within or without the uterus.

The first case to be mentioned here was a multipara at full term by menstrual history. An abdominal pregnancy was suspected, and many roentgenograms were taken, but all failed to establish any fact other than that an average sized baby was plainly seen. Operation disclosed an abdominal pregnancy of a living baby which weighed seven pounds.

A second case could not be diagnosed definitely by roentgenograms and when told she must have a laparotomy, refused the operation and left the hospital. She died three days later in her home, and a partial autopsy corroborated the diagnosis of abdominal pregnancy near term.

A third case was diagnosed rather definitely by physical examination and sounding of the uterus, but roentgenograms failed to prove or disprove the diagnosis. Operation proved the abdominal pregnancy diagnosis.

A fourth case was thought to have an abdominal pregnancy. The roentgen ray showed an apparently macerated fetus, but failed to prove its presence within or without the uterus. A sound in the uterus was not conclusive. Artificial dilatation of cervix and exploration of the interior of the uterus proved the fetus not to be in the uterus. Laparotomy showed a macerated fetus in a false sac attached chiefly to the right broad ligament.

A fifth case was supposedly five months pregnant and very ill. She had lost much weight and had a very tender, rigid lower abdomen, and was in great pain. A fetal heart could be heard. Roentgen ray failed to establish definitely the location of the fetus. Bimanual examination, even under anesthesia, failed to establish definitely a diagnosis, but abdominal pregnancy seemed probable and was found at laparotomy.

A sixth case was first admitted to medical ward and no diagnosis of pregnancy was made until the roentgen ray revealed a fetus. She had had vaginal and abdominal examinations, but her cervix was firm and it was not thought she could have a uterine pregnancy. Abdominal pregnancy was

not considered until she reached the obstetrical ward. Repeated vaginal examinations had not been sufficiently elucidating to establish a diagnosis. The patient was dangerously ill, running a very rapid pulse and an elevated temperature. Being aware of much work which has been done on injection of iodized oils, etc., in the uterine cavity for the solution of sterility problems, and



FIGURE 1

also being familiar with the work of certain investigators who have injected these substances into the uterine cavity for the purpose of diagnosing ordinary intra-uterine pregnancy, I decided to inject this uterus and secure roentgenograms. The insert No. 1 shows the characteristic roentgenogram of the non-pregnant uterine cavity. The loop at the bottom of the picture is an ordinary sponge forceps grasping the cervix. The intra-uterine cannula (in this instance an improvised one) also shows in the uterus. Some of the iodized oil apparently has leaked out through one ovarian tube. The fetal parts are not well reproduced in this picture, but insert No. 2 is included in order to show the fetal parts in another picture of the same patient. This latter roentgenogram, it will be noted, fails entirely to establish a diagnosis as to whether uterine or abdominal pregnancy.

Immediately following the taking of the roentgenogram, a laparotomy was performed, and an abdominal pregnancy was found, and it is quite evident by these roentgenograms that the pre-operative diagnosis was definite.

I have resorted to extensive correspondence in an effort to ascertain whether the roentgen rays

had ever been used before for this exact purpose, but have failed to discover any such report. Thousands of cases of similar examination are recorded in sterility cases. Probably the first author to report the injection of roentgen ray opaque substance into the uterine cavity for the purpose of establishing a diagnosis of uterine pregnancy was Heuser,¹ and his findings are best given in his own words: "If the injection has been made successfully, the radiograph of the uterine cavity filled up with lipiodol shows: 1. That the cavity is not well filled if the fetus is more or less developed, the lipiodol penetrating around the fetus, and showing that the cavity is occupied. The round shape of the stain with the radiograph of a tube, together with the clinical symptoms, indicating the pregnancy. When the fetus is larger, the liquid penetrates very little, in a line more or less curved, and the form of the radiograph of the

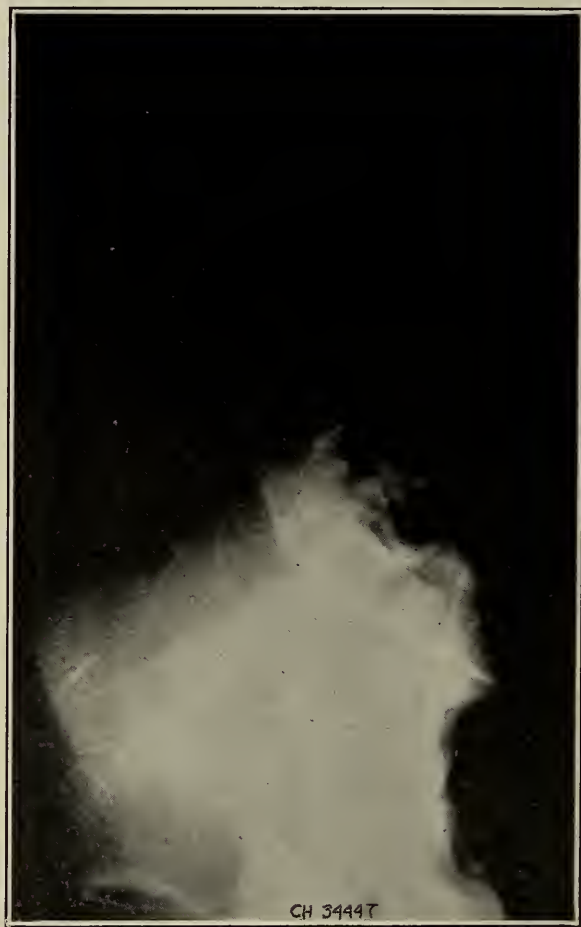


FIGURE 2

uterus indicates the pregnancy. If the period is missed once or twice, and the patient thinks herself pregnant, the injection of lipiodol into the uterine cavity may show in triangular shape, and at the same time one or both tubes may fill up with the liquid. In such a case the radiograph shows that the uterine cavity is unoccupied and there is no pregnancy. Every radiograph of the uterine cavity must be complete in order to show the neck and cavity for a satisfactory diagnosis to be made

from it, together with the clinical symptoms." Rucker and Whitehead² report thirteen such examinations. Miller and Martinez³ report fifteen cases, but abandoned the further use of this procedure after three of their cases aborted.

It is not the purpose of this paper to discuss the pros and cons of the use of the procedure as mentioned by these authors, as they were in no instance confronted with a possible advanced abdominal pregnancy. It certainly would seem, however (and Miller and Martinez so admit), that there would be great danger of abortion. But in the desperate case of possible advanced abdominal pregnancy where there is the usual difficulty in diagnosis, the risk of producing an abortion in case we were dealing with a uterine pregnancy certainly is justifiable, and it is in the hopes that the procedure here reported may aid a confrere as it aided me that it is submitted.

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TUBERCULOSIS THERAPY

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INDIANAPOLIS

In comparing the treatment of tuberculosis with that of other diseases, there is almost no other malady from which man suffers in which drugs are so little used. The explanation for this is not hard to find. Up to a few years ago false and fraudulent claims for the cure of tuberculosis were being offered, and occasionally the attention of the medical profession focused for a time on some form of treatment that promised to be a specific. No specific has been found, and probably never will be. In many ways it probably is best that no specific is to be had for the treatment of tuberculosis, because by evolving a general plan of treatment which has had so much to do with elevating the general standard of living and the diffusion of knowledge about tuberculosis, much has been done to improve the health of the people as a whole.

At the time when the fight against tuberculosis became a great public problem, every conceivable form of drug combination was suggested as a cure, and it became necessary for the leaders in this fight to emphasize the fact that no drug or combination of drugs would cure the disease, and this is just as true today. They placed the treatment upon sound and everlasting principles, rest, regulated exercise, fresh air, and appropriate diet. The pendulum swung far away from the use of drugs altogether.

No one at this time is going to deny that rest, regulated exercise, ventilation, and proper food are the fundamental principles upon which the treatment of tuberculosis, and for that matter the treatment of any disease or the maintenance of good health in the absence of disease, must de-

pend. However, with our continual gain in knowledge concerning the physiological functions of the body, can we not greatly improve the treatment of tuberculosis by using those agents which are used so commonly in the treatment of other diseases? To restore to normal function disorders that are encountered in the treatment of tuberculosis?

Let us first consider the secondary anemia that is always present in tuberculosis. The hemoglobinometer nearly always shows an iron deficiency of from twenty to forty percent. This finding encountered in the treatment of any other disease calls for the administration of iron. When we come to consider the two-fold function of the hemoglobin, and in a wasting disease like tuberculosis, it has added importance in the urgent need for building up general physical tone, what can be the objection to the judicious employment of iron in the treatment of tuberculosis? In the old conception of anemia we visualized only the iron content of the blood, never taking into account the importance of the other essential blood salts. Now we know much concerning function of blood calcium, and can rather definitely estimate the amount of calcium in the blood by the coagulating time. Surgeons no longer take chances of having grave hemorrhages during operations, but insist upon having a normal coagulation of the blood, except in emergency cases. When we consider the marked tendency of the tuberculous to become hemorrhagic, it would seem that from this viewpoint alone it would be necessary to maintain a normal blood calcium. Further, no one can longer deny that calcium does play an important role in healing tuberculous areas by calcifying them. There is now little need of giving calcium intravenously, as many preparations of the salt for oral administration are now available. It is also possible to prevent calcium loss by the use of parathyroid extract.

Much has been learned about food values. We now have a fair comprehension of what vitamins are and their relation to metabolism. Modern chemistry now presents these preparations in a palatable form, and in rickets we see vitamins playing an important role in the fixation of calcium in epiphysis of the long bones. May it not be that in the tuberculous, vitamins have a like function in the calcification of the tuberculosis areas?

There will be those who will say that an ample diet will take care of all of these needs. This objection will be met by asking, is there any other disease in which sane, rational, therapeutic measures are left to be supplied by diet alone?

Most tuberculous subjects are found to have low blood pressure, and present that clinical picture known as the tired syndrome. Even after arrestment or cure has come about, the blood pressure will still be found too low. The employment of endocrine products will correct this condition, im-

proving the patient's endurance and adding much to his comfort as well as usefulness.

In the consideration of common cold infection it must be apparent to the most casual observer that colds play the most disastrous role in the combat against tuberculosis, if not also the most important factor in the development of the disease. The history of tuberculous patients nearly always includes the statement that the trouble followed a cold infection. We have been inclined to regard this as the layman's way of explaining the early symptoms of his disease. But this cannot account for the increased number of active cases of tuberculosis that are seen to follow every epidemic of acute respiratory infections. It likewise has been observed that more cases of active tuberculosis are encountered in the winter and spring months than in the remainder of the year when common cold infections are less prevalent.

It has been stated repeatedly by many that a pure unmixt tuberculous infection of the lungs does no damage and in most instances gives rise to no symptoms, but when this infection becomes complicated with mixed infection bacteria, then the vicious cycle begins. Dissolution of tissue takes place. Toxins are generated, and we now have, instead of an inactive process, an open suppurative active tuberculosis. In the majority of instances common cold infections are responsible for the changing of what was almost a harmless tuberculosis infection into an active destructive process. Accordingly, whatever can be done to prevent or control common cold infection adds much to the prevention of tuberculosis.

The value of stock vaccines, as a prophylactic against cold infections, remains a disputed question, but when it is considered that most of the great biological laboratories have been selling enormous quantities of these vaccines for many years, it must be concluded that their value has been established or else their use would have been discontinued. The writer recently addressed a county medical society at which half of its membership was present, and a vote was taken to determine how many of them used mixed catarrhal combined vaccine as a prophylactic against common cold infections and as a treatment for the secondary infections that follow colds, and it was found that all of them present except one, who is a surgeon, made such use of this vaccine and were satisfied that it is of great value. If this expression from this group of physicians is representative of the profession at large, and it would be strange if their judgment differed from similar groups elsewhere, then it would appear that the profession, especially the general practitioners, approve of the use of this vaccine. It would be helpful if a survey of the profession were made to determine the consensus of opinion regarding this question. My own observation has extended over many years and my view is that we have no other agent of equal importance in the prevention

and treatment of common cold infection. The cautious and prolonged use of vaccines for the control of the mixed infection phase of active tuberculosis is one of the most valuable agents we possess in the treatment of this disease.

Therefore, in the treatment of tuberculosis would it not be well to apply all rational therapeutic agents that will aid in restoring to normal balance all the disorders that are brought about by or associated with this disease?

CANCER OF THE CERVIX UTERI

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It is a well-established fact, determined from statistics, that cancers of cervix are the most frequent of all malignant tumors that occur in women, and occupy a very close second rank among all forms of cancer in both sexes.

It is always better to prevent than it is to cure. It is also better to keep well than it is to get well. These facts make prevention of diseases the most important subject with which the modern physician has to cope. Nowhere is this great work of prevention of a very common cause of death of greater importance and necessity than in malignant uterine neoplasms.

Today there are living in this country thousands of women who have cervical lesions that will become definitely malignant and terminate fatally within the next three years. This is a terrible thing to contemplate, especially when one considers that the vast majority could have been prevented.

There is still another very important reason why the prevention of uterine cancer should be considered more and taught definitely. It is this: When cancer is well started there is very little chance of a real cure in the sense of a complete eradication of every vestige of the cancer tissues. Even in the supposed very early cases the physician has no way of absolutely knowing that he has been successful in removing or killing the deadly cells, no matter what method he may have used.

It is also a well-established fact that women have to expose themselves to a great deal of suffering and danger to carry on the physiological functions of the genital tract. This is unfortunate but true. It always has been so and will continue to be so as long as women bear children. In view of these things there appears only one way to combat this deplorable state of affairs and that is by the recognition of these abnormal processes which predispose to malignancy in the earliest stages. To accomplish this very much desired solution of one of the big problems before the profession today, one must become familiar with those numerous lesions and combinations of lesions which are known to precede the full developed destructive new growth.

Cancer never develops in normal tissues. So far as is known there is always something which predisposes or invites abnormal cellular changes.

In recent years there have been important changes in the conception of the cervix uteri and its diseases. Its importance as a strong factor in the production of leukorrhea and sterility have been demonstrated. The inflammatory and structural changes which are so common and their significance as predisposing to cancer are being more clearly understood and appreciated. Along with our better understanding of this important structure, its physiology and diseases, must come better methods of treatment.

A brief review of the cervical anatomy may be helpful. The cervix is a special, distinct part of the uterus, having a rather complex structure, and for a definite purpose. Histologically the cervix is covered by two distinct types of epithelial cells, with an intervening stroma of smooth muscle fibers, connective and elastic tissues. The cervical canal, which is by far the most important from a disease consideration, is lined by a single layer of high, narrow, columnar cells with a nucleus near the base resting on a fibro-muscular stroma into which are thrust the compound racemose glands, which are so numerous and the basis of so many of the cervical disorders. The cervical canal is about one inch long, terminating in that important barrier, the internal os. The cellular transition from the columnar to the stratified, squamous type of cell at the external os is very abrupt. The outer covering of the cervix has no glands and is seldom the seat of disease.

Because of the delicate, complex nature of the cervix, and also because of the infection and trauma to which it is subjected, make it the most frequently diseased single structure in the body of the female. The mucosa is especially easily infected with the gonococcus and without trauma. It shows a rather marked tendency to infection with other organisms following trauma.

There are certain conditions that definitely predispose to malignant disease in the cervix. The fact that there is an abrupt change from one distinct type of epithelial cells to another variety has a bearing. The very frequent injuries of the cervix at this junction and of its glandular structures invites cellular changes. Chronic infections when added to the injured tissues are very prone to stimulate abnormal cellular activity. It is a condition of injury plus infection. Resulting from the above changes there is persistent discharge of greater or less amount and variable, irritating qualities. Another finding which is overlooked usually, but is a very common one, is the poor drainage of the cervix from constrictions or deformities. Misplacements producing a chronic passive congestion may contribute in a small way in the presence of some or all of the other conditions mentioned. All of these things mean just one thing—chronic, persistent irritation.

There is no doubt but what some form of irritation must be at the very bottom of beginning malignant changes. When we say we do not know the cause of cancer, we mean that it is not understood just how irritation provokes cells to disobey the natural laws of growth and reproduction and grow wild.

It is the purpose of this communication to call attention to and to emphasize the importance of due consideration, observation, diagnosis and the proper early treatment of chronic irritation lesions. No such lesion should be neglected.

The term "precancerous" condition or lesion has been used to designate these atypical cellular activities. Many object to the use of this term. I like the term as it expresses what really exist in every instance before real cancer cellular changes begin. It is said that a condition is or is not malignant. Quite so, but there are many findings that are so nearly like cancer that even the most expert pathologist will not render a definite opinion. It is this idea that has been one of the great hindrances to the early recognition of cancerous processes. If one waits to have definite symptoms of cancer become evident, then there is no possibility of reducing the mortality.

A consideration of the suspicious cervical lesions is so closely related to cancer formation that it seems well to review them briefly that we may have a clear picture in mind as to the precancerous basis.

Cervical erosions contribute by far the largest number of precancerous lesions. It is the most frequent cervical lesion. It is always secondary to some form of irritation, usually more or less chronic. It is found most commonly in women who have had children with laceration and infection. Its importance as a forerunner of cancer is evident by the fact that cancer is nearly always found in parturient women. When found in other women there usually has been some form of chronic infection without trauma. Chronic infection on a traumatic basis in the production of cervical malignancy is established fully by observation and in the literature.

These lesions are not erosions in the strict sense. There is no tissue loss, but rather a glandular overgrowth or hypertrophy. They are distinct histological examples of abnormal epithelial proliferation. Adenomatous features are often seen and with very little stroma. In certain parts it is difficult to differentiate between erosion and beginning carcinoma. As a lesion of importance erosion with trauma ranks first as a precancerous process.

Another lesion which is not nearly so frequent is cervical polyps. Such lesions may precede, occur with or be independent of erosions. They manifest abnormal cellular proliferative changes. The cylindrical cells dominate in this type of lesion, giving it a glandular character, with very little stroma. Mucoid degenerative changes char-

acterize these lesions. We consider such proliferation changes as definitely precancerous because of the quality variation of the cells. Any cervix which presents this tendency to form polyps should certainly be observed at least twice each year, especially from forty to fifty years of age.

Chronic endocervicitis with multiple glandular retention pockets and inadequate cervical drainage is another very common source of chronic irritation. This condition may not be very evident on the external part of the cervix. It is overlooked easily. It is this type of lesion that very frequently precedes the adenocarcinomatous variety of cancer. It often becomes well advanced before there is the slightest outward manifestation. I think this type of cervical lesion is most frequently overlooked and neglected and mistreated.

Another lesion which fortunately is rare is leukoplakia. It represents a very striking atypical overgrowth of squamous epithelium. When found it should always be looked upon with grave suspicion. It may act as a covering or mask for a malignant underlying activity. This lesion is thought to have a syphilitic origin in many instances. It has long been considered as a forerunner of cancer of the tongue and just as well may be active in the cervix.

With this review of the leading precancerous cervical lesions we can take up the consideration of their relation to carcinoma of the cervix. I believe that a precancerous lesion is decidedly a potential cancer. Not all by any means will produce malignancy. If they did the death rate in women would be appalling. It is a very difficult task to tell the difference between such lesions and early malignancy in many instances. Early carcinoma are always local miniature growths which if left to their own activity will produce a highly destructive malignant condition. In precancerous processes. There are cellular formations but retain fairly accurate normal cellular laws of reproduction. In early cancer there is found disregard of the laws of cell reproduction with marked proliferation of abnormal epithelial cells progressing beyond the conditions seen in precancerous processes. There are cellular formations which vary greatly in size as well as marked irregularity in the size of the nucleus. If there is a tendency to the formation of epithelial pearls, then one may be sure that there is an early but definite malignancy. If it were possible to find all such conditions at this stage one could cure most of them, but even at this very early stage with the best of treatment, a number would eventually die a cancer death.

Now what can be done to prevent the development of malignancy in the cervix. I am sure that there can be a great deal done to reduce uterine cancer death. First and above all, the most important is the immediate repair of birth laceration of the cervix. If it were possible to repair the

injuries at once in all cervixes over a period of time there would be observed a great reduction in uterine malignancy.

There is not much that can be done to prevent cervical laceration. Prevention of these lesions would be the ideal way to prevent a large number of precancerous processes. As this is out of the question, then the next thing to do is to repair the cervix when injured. Immediately after the passage of the placenta the physician should open the vagina with retractors and grasp the cervix with fenestrated sponge instruments to prevent further injury and draw the parts into view for direct inspection. This is not difficult in a hospital but very difficult or impossible in the home under ordinary conditions.

In order to facilitate the work it is good practice to use pituitrin or ergot to insure a firm uterine contraction with the minimum amount of hemorrhage. Fundus pressure is very useful as it tends to control bleeding and by proper manipulation expresses the cervix well down in the vagina where it may be grasped easily and inspected. The parts are cleansed and gone over thoroughly with five percent mercurochrome. The use of ether on the torn, injured surfaces helps to bring out the tissues that one wants to unite. Everything is done under the most aseptic precautions. The very small tears less than one-half inch deep may be disregarded as contraction will take care of the small ones. The deeper tears which usually occur on the lateral sides of the cervix are closed with thirty-day chromic catgut on a round, curved needle. The mattress type of suturing is best as it does not tend to irritate the glandular structures. Sufficient sutures are applied to make a good coaptation without constriction. Union is usually prompt and without infection of consequence. Care must be taken not to place sutures too close to the external as they may lead to stenosis of the cervix, which is an annoying condition. Cervices so repaired usually heal and give a cervix six months after delivery which is practically normal, especially so if the uterus has returned to its normal position. The return to such position can be aided greatly by the use of the prone abdominal and knee-chest positions after labor. The health of the cervix depends a great deal upon the position of the uterus.

If it is not possible to make immediate repair then it is advisable to wait a sufficient time for the genital tract to return to normal as nearly as it will. This requires from three to six months. During this time properly applied local treatments are very useful. One of the best forms of treatment is the cautery. This may be used with or without a local anesthetic, depending upon the condition of the tissues and the sensitiveness of the patient. If a local anesthetic is needed, I have found a one percent novocain solution injected at five or six points around the cervical canal up as far as the internal os to be satisfactory. A long,

sharp needle on a ten cc. syringe is sufficient. The cervix is exposed through a wide mouthed speculum and grasped with a small tenaculum and drawn down and held firmly while the injections and treatments are made. The cautery blade should be about two inches long, narrow and thin. I have found the Post type to be most useful. The blade is heated to a cherry red and inserted into the cervical canal almost to the internal os. One must be very careful and not go through it as stenosis may follow. By gentle pressure the blade is inserted into the cervical tissues and drawn outward. This cauterizes a strip of tissue about one-fourth inch wide and should be deep enough to reach to the base of the glandular structures. From three to six or eight such radial strokes are made, taking care that they are not close enough together to destroy too much of the mucosa. This treatment will cause quite a sharp local tissue reaction for a few days with a free discharge. The patient must be informed of this and requested to stay in bed or be quiet. Daily hot, astringent, antiseptic douches taken slowly, lying on a bed pan or in a bath tub, are very helpful. Instruct the patient to insert the tube the full depth of the vagina. The therapeutic action of the douche is often lost because of the lack of this precaution.

After the first week local treatments should be made and close observation kept if one is to expect good final results. It is all wrong to cauterize the cervix and let it go without follow-up treatment. Bad results will follow. The use of from ten to twenty-five percent silver nitrate or mercurochrome five to ten percent are very useful. Churchill's tincture of iodine is also very good in certain cases. All of these preparations may be used at various times during the treatment with benefit. What to use and how best to use it depends upon the character of the tissue reaction and the experience and judgment of the physician.

The object of the treatment is to restore the diseased cervix to as nearly normal as possible. To do this one destroys the protruding infected mucosa forcing its retraction back into the cervical canal and encourages the growth of the squamous cells about the external into the canal to a distance of about one-quarter inch. A cervix in which the vaginal epithelium extends into the canal is not likely to become infected or be a source of chronic discharge.

A form of treatment that has given very good results in many cases is the injection of five percent mercurochrome around the cervical canal. This is easily done by grasping the cervix and inserting a one-inch, twenty-five-gauge needle under the mucosa up to about the level of the internal os. The alcoholic mercurochrome solution is injected as the needle is withdrawn. At the first treatment four points are injected at locations corresponding to ten, two, four and eight on the clock dial. Such treatments are made once

each week at different points for a period of from six to eight weeks, depending upon the lesion. I have found that the untraumatized cervix responds best to this treatment. It is especially useful in women who have rather tight vaginae. Other solutions have been used, such as alcohol or a five percent alcoholic solution of picric acid. In my hands the mercurochrome has been most useful.

Other forms of heat application may be used besides the cautery. The chief of these is diathermy. This is a good form of treatment in many cases, but must be used with judgment and care.

In those cases presenting the deeply lacerated, hypertrophied, everted, eroded conditions, very little can be done by local treatment. In such cases the cervix is usually quite close to the introitus and the body of the uterus in marked malposition with associated varicose veins and more or less ovarian disease. Such cases should be considered surgical gynecology. Women from twenty-five to forty years of age should be treated with the purpose of leaving the genital tract intact for the menses and reproductive functions. This is one place in the practice of surgery where a definite knowledge of anatomy and physiology is very essential. One must take into consideration a great many things. The judgment of the physician based on observation and experience is the best guide. It is just as important to know what to do and what not to do as it is to know how to do what seems indicated.

In the moderately severe cases cervical reconstruction gives good results. This work must be done in such a way as to restore the cervix to its normal contour with a minimum of scar tissue and the prevention of the exposure of cervical mucosa outside of the external os. Associated lesions such as perineal tears with relaxation and uterine and ovarian malpositions should be corrected at the same time. The best cervical results will not occur with the uterus left in bad position. The cervix will not be normal with a chronic congestive irritation in the pelvis.

In the very bad cases with marked trauma and irritation it is best to do a cervical enucleation with correction of associated pathology. If the woman is near the close of her reproductive life it is advisable to do a complete uterine removal with or without oophorectomy as may seem indicated in the particular case.

Minor lesions of the cervix should be corrected. Cervical polypi are usually innocent affairs but indicate a tendency to cellular over-activity which is abnormal. Their presence in the traumatized cervix is of more significance than in the non-parous one. They are treated easily by cautery. A cervix showing a tendency to polypi formation should be inspected frequently and the patient informed of the possibility.

Another lesion which is usually overlooked is stenosis of the external os. In such cases there

is a very small opening with a dilatation between the external and internal orifices, with retention and chronic irritation. I have seen carcinoma which seemed to have resulted from this type of lesion. Such conditions result from scar contraction incident to infection or trauma. These lesions are best treated by dilatation or removal of the contracting tissue. Good drainage is essential. All retention cyst of the cervix should be incised, cauterized and treated until complete healing has occurred.

CONCLUSIONS

1. The majority of cervical malignancy is preventable.
2. The cervix is the most frequently infected and traumatized structure in the female.
3. The cervix is the most neglected, poorly treated and most mistreated tissue in the female.
4. Most cases of malignancy occurring in women develop in the cervix for the reason that it is the most frequent chronically irritated structure in the body. This fact alone is strong confirmatory evidence of the part that persistent irritation plays in malignancy.
5. Immediate cervical repair at the close of the third stage of labor is sensible and advisable and should be done when the operator has sufficient experience and the surroundings permit.
6. If immediate repair is not done, an early post-labor operative restoration of the normal anatomic arrangement should be done. This will greatly reduce the possibility of scar tissue, erosions and deep infections.
7. After a woman has given birth to her children and has reached the age when further pregnancies are undesirable, I feel it is definitely indicated to correct all abnormal processes in the genital tract and restore it to as nearly normal as possible.
8. Modern methods of treatment of cervical cancer are most discouraging. Only a very few cases are definitely cured. There is no way of knowing by any or all methods of treatment whether or not the cancer tissue is all destroyed. The peculiar cellular activity of infiltration and metastasis makes malignancy different from other diseases and very hard to cure.
9. Cancer is always a local process in the beginning and never has its origin in normal tissues. These two facts make it very urgent that all chronic irritating lesions be corrected. The appeal in this paper is based upon these facts.
10. Lastly, but by no means of least importance, we as physicians and guardians of the public health must be more diligent in urging the importance of regular, periodic examinations. In no class of practice is it of more importance than in lesions of the genital tract.

PUERPERAL FEVER*

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The name is a misnomer in that it implies an essential zymotic disease. From time immemorial down to the middle of the eighteenth century the belief persisted that puerperal fever was an essential zymotic disease peculiar to lying-in women, and was thought by many to be contagious among lying-in women only.

Many fatal epidemics are recorded in this and other countries during the sixteenth and seventeenth centuries in London, Paris, Vienna and in the German cities. In many of them the mortality was frightful. The disease was recognized by the ancients as far back as the time of Hippocrates, many very clear descriptions of child-bed fever being recorded. The term child-bed fever was very commonly used by both doctors and the laity, even down to a very late period, to designate an essential fever peculiar to lying-in women, which was thought to be contagious among lying-in women, and believed to be due to some miasma that affected only the puerperal state. The infectious character of the trouble was unknown. Even as late as 1880 very few if any obstetricians thought it necessary to use any aseptic precautions to prevent infections in the lying-in state. As late as 1860 Meig and Hobs, at that time the best authority on obstetrics in this country, hooted at the idea that the obstetrician could infect the patient with his hand in labor, and it was no uncommon thing for a doctor to attend a case of confinement without washing his hands until it was all over. Even as late as 1880 Fordice Barker held to the idea of a zymotic fever that spread from one patient to another by contagion peculiar to the lying-in woman. In 1880 the third edition of Playfair's book was published. He used the term puerperal septicemia, and discarded the idea of an essential zymotic fever. Then other men began to question the truth of the prevailing theory of the trouble. Playfair pointed out the fact that lying-in women were affected by the poison of erysipelas, scarlet fever and diphtheria. Even as late as 1896 Lusk and other authors still retained the name puerperal fever although discarding the idea of an essential zymotic disease. It was not until the latter part of the eighteenth century that the light began to penetrate the darkness of the ages past. From the birth of the human race down through ages mothers have been dying by the thousands—victims of ignorance and superstition. In 1840 Henley concluded that the cause of infectious disease was to be sought for in minute living organisms or fungi and was in reality the propounder of the germ theory of disease, but as late as 1875 the number of scientific men that accepted the germ theory of disease was small indeed.

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The work of Henly, Mitchell, Obermier, Klebs, Koch and Lister was like the rays of the morning sun dispelling the darkness of the ages. In 1873 Obermier discovered the spirillum of relapsing fever. In 1878 Hauser discovered the bacilli of leprosy. In 1884 Eberth found the germ of typhoid fever, and Posture published his work on chicken cholera. In 1883 Koch found the tubercle bacilli and in the same year Loeffler isolated the bacilli of diphtheria. In 1890 Behring explained to the world the principles of blood serum therapy and thus was laid the foundation of modern scientific medicine, making it necessary to revise the literature of the entire field of medicine and allied subjects. Owing to the discoveries of the last twenty-five years, the changes have been so rapid and radical that we scarcely can comprehend them. As late as 1884 not a single professor of the Louisville University had fully accepted the germ theory of disease.

When I began the practice of medicine in 1884 I thought I was doing exceedingly well when I insisted upon a pan of hot water into which a few drops of carbolic acid had been placed and my hands were washed with soap in this solution. Thoroughly antiseptic before I made my examination, but with never a thought of any special preparation of the patient, for in nine out of ten cases I never saw the patient until I was called to the bedside to find her well advanced in labor, but I always insisted upon time to wash my hands before examination, and I also insisted upon the patient having clean rags as napkins to take care of the discharges, and strange as it may seem, I believe I attended more than three hundred cases before I ran into any postpartum trouble, due, I believe, solely to the fact that my work was exclusively among country women hardened by work and free from venereal disease, immune to ordinary germs with which they came in contact. The first puerperal infection I encountered was in 1888 or 1889, during the spring and early summer. Erysipelas was epidemic in the county, and I believe that three out of every five women delivered during that period in the county died of septic fever. I lost two patients within six weeks. The first developed a chill about six hours after delivery and died of peritonitis on the fifth day. She developed convulsions before she died. The second one died of septic peritonitis on the third or fourth day after confinement. With the exception of a case of gonorrheal infection in a primipara, these are all the fatal cases I recall now, out of somewhere between 1,500 and 2,000 deliveries. I have had quite a number of cases more or less severe, but have had the good fortune to pull them all through, or else they got well in spite of me!

So much for the history of the development of the present status of the disease. I think it is now an established fact that puerperal fever, so called, is always the result of infection. The

cause may be classified as predisposing and exciting. Anything that depresses the vital forces of the patient may act as a predisposing cause, such as over-work, mental worry, bad sanitation and pre-existing disease, latent gonorrhea, vaginitis, erosions about the cervix, diseased tubes or ovaries, disease of kidneys and dietetics. These all should be taken into consideration and corrected as far as possible before delivery, but it is a long way to go yet before the public is educated to the point where each and every woman, as soon as she becomes pregnant, will place herself under the care of a competent physician and be guided by his advice.

Of the exciting or immediate causes may be mentioned first the various strains of streptococcus as found in erysipelas, scarlet fever, pneumonia, pneumococcus, colon bacillus, and the staphylococcus, and it is of the utmost importance that we should make a correct diagnosis in these cases, for it is upon this and the promptness with which we act that the final result will depend. Here we are confronted with, oftentimes, a difficult task. It is an easy matter to recognize the fact that our patient is not all right, but not so easy to tell just what form of infection with which we are dealing, and many things are to be considered before we can decide the question. Given a case which develops a chill in the first twenty-four hours followed by high temperature, that in turn is followed by sweating and then another chill, we may rest assured that we have one of two things to contend with—either a streptococcus infection or malaria fever, with the chances four to one that it is a streptococcus infection. In a patient of that kind I would take the chance and at once give fifty cc. of antistreptococcus serum and follow that with three ten-grain doses of quinin given every three hours. I would follow with a second dose of serum in twelve hours unless there had been marked improvement. Now some of you are ready to jump on me with both feet, accuse me of reckless treatment, say I ought to wait to verify my conclusions by the microscope, but that means delay and then again the microscope is very uncertain at this stage of the disease, and if you have a streptococcus infection a day's delay may prove fatal to your patient. But why the quinine? First, if your patient's chill is the result of a rekindling of a latent malarial infection it will cure your patient while at the same time if due to a streptococcus infection you have done no harm, for it is one of our best internal antiseptics and the safest febrifuge we can employ at this time. In some cases of violent invasion I would say give 100 cc. as the initial dose, and repeat every twelve hours until the infection was controlled. In this case we are dealing with one of those fulminating emergencies in which delay simply means death. Luckily they are not so frequent as they used to be.

In no other class of cases is a carefully taken

history more important than in obstetric cases. It should include a careful summary of her surroundings for at least a month before confinement. What are the sanitary conditions of the home? Has she been exposed to any form of contagious disease, especially erysipelas, scarlet fever or diphtheria, or any of the other infectious diseases? Ascertain, if possible, whether she has any vaginal or cervical trouble. In cases of chronic discharge, examine for gonococcus and the knowledge thus acquired may enable you to forestall trouble that may save the life of your patient. Yet with all of your care, you occasionally will run into trouble. Go in to see your patient on the second or third day to find her with hot, flushed cheeks and unnaturally bright eyes, and a quivering lip when she greets you—she has as yet had no chills or sweats—the axillary temperature anywhere from 100 to 102, pulse 90 to 110; upon inquiry you find that the lochia is scant or stopped altogether, and now, perhaps, your heart skips a beat. You wonder what can be wrong. Are you sure the uterus is emptied completely? Did you examine the placenta so that you are quite sure no part of it was left behind? Was there any laceration about the perineum or cervix? Now is the time to find out, by a careful, painstaking investigation, and to be sure that the uterus is empty. This fever may be any one of three things. It may be simply wound fever, caused by the absorption of poisons through the torn cervix or perineum, or it may be due to some decaying retained piece of membrane or placenta, or it may be the beginning of a gonorrheal or staphylococcus infection. Your examination now should be thorough. The vagina should be washed thoroughly with some mild antiseptic solution. Then through the speculum one or two sterile cotton wrapped applicators passed through the cervix and into the uterus and endeavor to ascertain what kind of infection you have to deal with. As a guide to serum therapy, on several occasions I have found and removed a small strip of retained membrane from the cervix to be followed by a rapid recovery from all the symptoms, and here again a few doses of quinine may serve you well, by starting up the lochia again and reestablishing drainage.

Treatment will depend upon what you find. If you have stitched up some perineum and you find it tense and swollen, cut the stitches and pull it open. You can repair it better when the patient gets well. If you find a gonorrheal infection, you are in for some trouble and as a rule for a long siege and often a losing battle. It is in this class of cases that copious, hot antiseptic douches seem to do good. With the patient on her back, with the hip raised, on a douche pan, a gallon of hot water may be used two or three times a day, or a half gallon of a 1 to 3000 bichloride may be used followed by a gallon of hot salt water. If you find the gonococcus, I would not hesitate to

give some of the Neisser vaccines or some of the later gonococcal serums. I once had very gratifying results from a stock serum put up by Parke-Davis, under the name of Fylacogen. Three injections cured a patient that had failed to respond to any other treatment. Now I have noticed in these cases, with the possible exception of diphtheria infection, that the discharges generally are free from foul odor if the uterus is clear of loose, decaying material. Even considerable portions of after-birth, if not separated from its attachment to the uterine wall, will retain its vitality and give off no foul odor. It may cause hemorrhage, but no odor. Hence if you have a foul-smelling odor you had better explore the cavity and remove all of the debris you can, and if you get out all that is loose you soon will be without any foul odor, and almost certainly find your patient better the next day, and often you will have no further trouble. I have seen this happen several times and I do not recall a single case in which I have had to regret having done this. This should be done with a dull wire curette and as gently as possible. I consider that there are just two conditions for which we are justified in using the curette—the dull wire curette for the removal of retained, decaying debris, and the sharp curette in the case of hemorrhage. The first one nearly always can be done without an anesthetic, and always with benefit to the patient.

Hemorrhage occurring several hours after labor always is due to one of two things: an attached piece of after-birth or a lacerated cervix, especially if we have a reasonably contracted uterus. I saw a fatal case of post partum hemorrhage from a piece of placenta not larger than a silver quarter with a completely ergotized uterus. This case could have been saved by a timely use of a sharp curette.

I am almost ashamed of this rambling survey of a very difficult subject, but I hope that in the study and discussion we may derive benefit from it.

The young man in the profession today has many advantages over us who began forty or fifty years ago, but when your heads are silvered with age you will look back with regret at the results of many cases that have passed through your hands. Be as careful and painstaking as you may, you will run into cases that will try your souls—cases that will slip through your hands almost before you know what is happening, and, now in conclusion:

I would advise you young men who are to continue to do obstetric work to study this subject well, for you are assuming a great responsibility, you are assuming responsibility for two lives in every case you attend; not only that, but often the sole retaining prop of a home and family. Therefore, it is your duty to study, to acquire the knowledge that will enable you to cope with the emergencies that may confront you at any time;

to enable you to throw around your patient every safeguard possible.

To sum up the subject, remember that the only road to safety is in prevention. When possible to do so, instruct your patient to avoid contact if possible, with infectious disease of all kinds. Endeavor to use absolute asepsis in handling your cases, do not attempt to handle a case of obstetrics if you are visiting a case of scarlet fever, erysipelas, or diphtheria. You may be able to get by with it, sometimes, but the danger is too great, and if your patient is infected you will ever after regret that you did not turn the case over to someone else. She and her friends will respect you for doing so and retain you in their family practice with increased regard for your honesty. Then, when you do attend a case, always examine the afterbirth to be sure that nothing is left behind. If the afterbirth is torn and you cannot tell by inspection, explore the uterus with the sterile-gloved hand before you take her off the table, because you can do it then with greater safety than at any time after. If trouble should intervene you will not be in doubt about the retained fecundines. Then in making your diagnosis remember that the lying-in woman is susceptible to all the ills that flesh is heir to, and consequently the more necessity for a careful history-taking. Has she been exposed to any endemic or contagious disease? If so, what? Then remember that the principal sources of puerperal infection are, first, the cadaverous poison from retained, decaying secundines, and second, latent gonorrheal infection; third, infection of the various cocci, and the colon bacilli. Infection from retained secundines may be violent in its inception, nearly always attended by foul-smelling discharge, and is generally relieved by promptly clearing out the uterus. Infection by the streptococcus usually is abrupt and violent in its inception and nearly always fatal. Early recognition and serum therapy afford the best chances for recovery. Infection from pneumococcus and colon bacilli are usually accompanied by chills and high fever, but are not so abrupt in their advent as the streptococcal infections, and do not run so rapidly to a fatal termination. Remember also that after assuring yourself that the uterine cavity is emptied of decaying fecundines, no other intra-uterine interference or intrauterine treatment is to be thought of, because you only will increase the danger to your patient in doing so by breaking down the limiting wall, and opening up new channels for infection.

From the time of Lister and the advent of antiseptics there was a period of several years when heroic measures were adopted, and doubtless many lives were sacrificed. It was believed for a while that we could cure the cases by curettage and intrauterine treatment and many ingenious instruments were devised for this purpose, such as the return flow intrauterine nozzles, the intra-

uterine syringe, etc., the uterus was irrigated with strong, sometimes caustic, solutions, bichloride solutions as strong as 1 to 1000, often was used in this way, followed sometimes by violent mercurial poisoning. Strong solutions were used and violent, vigorous attempts were made to render the parturient canal aseptic before delivery. Some advised washing the vagina with soap and water; others with 1 to 10,000 bichloride and then dusting with iodoform. Then the pendulum began to swing in the direction of less vigorous measures, but we have a long way to get yet, and many things we are doing now will be discarded in the near future, and our own thoughts will turn more and more to prenatal care of both mother and child. By careful supervision during the early months of pregnancy many sources of infection can be cured. Gonorrheal infections can often be cured during this period. Granular disease of the cervix as well as cervical lacerations which are unhealed with cervical indurations, can be made to heal and the indurations softened down by the persistent use of hot, mildly antiseptic douches, without any danger to either mother or child, and persistent, annoying leucorrhea made to disappear during this period. It is during this period that nature is making an effort to throw off these obstacles and prepare the mother for the coming ordeal.

CANCER OF THE RECTUM*

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Although cancer in general is a very ancient disease, concerning which our ancestors were quite as much vexed and puzzled as we are today, it was not until comparatively modern times that it was recognized that these growths could arise in hollow viscera quite as readily as upon the cutaneous surface. The "tumor" which could be palpated from without naturally attracted the attention of the very earliest pathologists, but that similar growths existed in the stomach or intestines, so located that no evidence of their presence could be determined by the meagre methods of examination permitted to our medical forebears, seems hardly to have been realized before the eighteenth century was well advanced. Most reviews of the history of this disease mention the name of Faget as being the first to make an attempt to operate upon it, but it is remarkable that none of the most highly esteemed medical historians confirm this statement. Neither Garrison nor Billings make any mention of it. The earliest mention I can find which bears the stamp of any authority is that made by Velpeau in the second volume of his work published in the second quarter of the nineteenth century, and this does not credit Faget with actually invading the rectum, as his remarks are under the general heading of "*Cancer of the Anus.*"

After describing everything known at the time

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in which he wrote concerning the non-surgical treatment of malignancy seated at or near the anus, Velpeau goes on to say: "Extirpation is a last refuge to which our thought then turns. Many have thought of this, but most have recoiled from doing so radical an operation, or have lost heart because of the difficulties which must inevitably attend it. Desault does not consider extirpation to be permissible, except in those cases where a tumor of highly malignant character lies so near the anus as to be reached without difficulty. Boyer holds the same opinion, and the entire following of the ancient Academy of Surgery has adopted this principle, of which Morgagni was the originator. That surgeon who in Morgagni's time ventured to attempt it, was not able to complete the operation; and Bécларd, who, according to M. Paris, held a course in surgery of operations at La Pitié in 1822-23, was accustomed to say that in the improved state to which the science of surgery had then advanced scirrhus indurations of the rectum should no longer be considered necessarily fatal, but that the affected parts might be removed, if we studiously avoided all injury to the adjacent bladder and the numerous vessels which abound about the lower extremity of the bowel. He never had, however, any opportunity to put his ideas into practice.

"It appears to have been Faget who was the first to perform this operation successfully, which he did on the ninth of June, 1739, in the presence of Boudou and his brother. Faget excised about an inch and a half of the entire rectal lumen. What seems most curious to the surgeon was that stools were formed by the new anus just as before operation, although almost all of the sphincter or plane of circular fibers which surround the anus had been removed. Observing how M. Gelé, his patient, was, soon after healing, able to hold back both solid and liquid feces, and even gas, Faget arrived at the conclusion that not only the anus, but the rectum at some considerable height above it, might be excised, that is, that the operation was perfectly practical.

"Proof of this has since been furnished by M. Lisfranc, whose first patient, operated February 13, 1826, found himself completely restored to health on the thirteenth of April following." Lisfranc obtained a similar success in the month of January, 1828, in a woman, and still later in a third patient, also a woman, who underwent operation July 15th, and was cured on October 28th of the same year. In a fourth patient the cure was not so sure, and the fifth died four days after operation, the direct cause being pelvic suppuration, with a phlebitis as well. The sixth was a man of seventy-two, who likewise died the very day after, no autopsy being permitted. The seventh subject of this operation died also, after the expiration of twenty-five days, and here also, there was pus in the pelvis and the veins. But in the thesis of M. Pinault from which all these facts have been elicited, there are also given two instances of

cure; from which we learn that up to the month of August, 1829, M. Lisfranc, out of nine such operations, was able to count up five successes, one but partially successful, and three deaths."

Long before Lisfranc's time, however, the existence of malignant growths in all parts of the rectum had been completely recognized, although the possibility of treating them—operatively or otherwise—had not been considered. Valsalva, the Italian anatomist who died in 1723, is said by his pupil, Giovanni Battista Morgagni, who was a far greater anatomist than his master, to have had several patients afflicted by these growths. In his *Thirty-second Letter*, Morgagni describes a disease of the intestine which Ruysch had mentioned some time before, which was designated as "a scirrhus thickening and surprising coarctation of the rectum." The condition brought about a great increase in the thickness of the rectal wall, so that it could hardly be distinguished from cartilage, and this so reduced the lumen of the rectal portion of the bowel that nothing larger than the finest probe could be passed through it. Morgagni once accompanied Valsalva when he made a professional visit upon a victim of this dread malady, and in his *Letter* he mentions that the master told him at that time, that the disease was not an uncommon one, the chief indication being the great difficulty which the patient had in discharging the stool, and the pain which was suffered because the glands had become ulcerated after thickening of the tissues. In one of these cases Valsalva had been able to see a ring completely surrounding the intestine, some three inches above the anus.

In this same *Letter* Morgagni also describes a case of his own. At autopsy he found that the rectum became hard and thick some six or seven finger's breadths above the anus, and that upon the surface at this point, were "bodies" which had the appearance as to size and shape, of large beans, smooth-surfaced and hard and compact. About one finger's breadth from the anus these growths ceased abruptly, so that a small space was quite free from them. Yet two polyps, apparently growths of the same nature, hung from the anus itself, and the skin outside appeared to be slightly ulcerated. The subject of this post-mortem examination was a fifty-year-old woman who had complained of "piles" for three years, but had suffered from the "more grievous disorder" which finally carried her off. And Morgagni in 1761 made the same observation which thousands of surgeons have made and are making even today, that rectal cancer is often unrecognized just because a diagnosis of "*piles*" is made without adequate investigation. But it was from the point of view of the anatomist rather than that of the surgeon that Morgagni viewed the possibilities of operation.

So despite the isolated attempts at description and removal which may have been recorded before Lisfranc read his paper to the Royal Academy of Medicine in Paris in March, 1830, it is only fair

to say that cancer of the rectum as a disease entity and a malady amenable to surgical treatment has existed but a single century. The early report of Lisfranc's work was followed by Dieffenbach, who listed an imposing array of cases cured by surgical intervention, but modern students of the subject are inclined to doubt the accuracy and good faith of this record, so much so that modern compilers usually omit any mention of his cases. Velpeau, from whom our information concerning Lisfranc is quoted, himself operated upon a number of patients suffering from rectal, or more properly, anal cancer, and is said to have considerably improved the method of attacking the problem. That none of this operative work was very satisfactory according to our modern standards may be gleaned from the words of Arpad G. Gerster, who wrote in 1895: "When we examine the imperfect, and therefore, bloody and dangerous procedure devised by Dieffenbach, Lisfranc and Velpeau, together with the high rate of mortality accompanying the radical operations of these authors and their contemporaries, our wonder is that any surgeon should have had the temerity to attempt the removal of an extensive rectal neoplasm. All of these procedures were characterized by the approach to the rectal tumor from the anus by a circular circumanal, or from a coccygeal, or from a perineal incision. Hemorrhage was inevitably copious, no means were taken to prepare the gut, and infection of the wound was the rule. A large proportion of the patients operated upon died of so-called shock—that is, acute anemia—within a few hours after the operation; a considerable fraction of the survivors succumbed to septic processes established in the wound, extending to the retroperitoneal spaces and to the peritoneum. Hence, the unwillingness of careful surgeons to extirpate, and their preference for a much safer palliative plan of treatment by colostomy is fully justified by the fatality following radical procedures."

While Gerster's strictures are fully justified, we should not forget that when Diffenbach, Lisfranc and Velpeau were in the height of their professional activity, Pasteur was a raw country youth just starting out upon the studies and experiments which were to make him the hero of the ages, and Lister, a rosy-cheeked English schoolboy, still mindful of the frown of a diligent nurse. Not till Lisfranc had been dead for a year did John Warren do that operation which Morton made painless by the administration of ether. What these early surgeons accomplished without anesthetics, with no knowledge of either antisepsis or asepsis, in the region of the body more than any other peculiarly subject to infection from within as well as without, should be regarded as pioneer work worthy of the greatest praise. It is not strange that the mortality rate was so high. The wonder is that any survived, and this wonder is only increased by a careful examination of the procedures and records of surgeons enjoying infinitely greater ad-

vantages who have since undertaken to cure rectal cancer by operation.

In the eighteen-fifties the investigation of rectal cancer, and the efforts of therapists and surgeons toward its amelioration, received a great impetus. In the year 1854 Chassaignac, a French surgeon, used the *ecraseur*, a heavy forceps, to cut through the pedicle of a pedunculated growth in the bowel. Masse' published an account of several operations successfully performed by Recamier, another French surgeon of note. Other French names associated with this period in the history of rectal cancer are those of Marchand and Maisonneuse, while in the German states Nussbaum, Schuh and Volkmann, and in England Jordan, Allingham and Holmes labored to improve methods of treatment and reduce the frightful mortality which continued to attend the disease whether treated or not. The methods of excision used were the circular enucleation originated by Lisfranc, the incision anterior and posterior to the anus, which had been Dieffenbach's mode of procedure, and by the year 1874, excision of the coccyx to open an avenue of approach to the rectum, which was the contribution of Theodor Kocher. Before this Bardenhauer had excised the coccyx, then opened the peritoneum, and in this way reached a carcinoma which was located very high up toward the rectal ampulla. He took out a considerable length of the rectum's entire circumference and performed an anastomosis. The results were not brilliant, nor were those of Verneuil who followed a somewhat similar method about this same time. Even when immediate healing followed, the patients who escaped sepsis practically always perished of recurrence within a comparatively short time. That Kocher succeeded so much better than his immediate predecessors is undoubtedly due to his appreciation of the value of aseptic precautions, for he sewed up the anus—thus lessening one fertile source of infection—and after removing the coccyx and opening the perineum, was able to take out the rectum as if it had a naturally blind ending. Miles points out that Kocher's whole procedure was a great advance upon anything which had gone before, for he had at length accomplished what Lisfranc had attempted to accomplish a half century earlier.

According to Gerster it was Richard Volkman who should be credited with reacting the operative treatment of rectal cancer from the neglect which fell upon it about the year 1880, or shortly earlier. The immediate death rate was so high and recurrence so invariable that physicians and patients not unnaturally concluded that death being inevitable it need not be delayed by the shock and suffering involved in operation. Volkamp, studying the pathology of cancers in general, came to the conclusion that those seated in the rectum were *per se* no more malignant than those of the female breast, which were at that time being regularly removed with favorable results in a good percentage

of cases. It was evident to him that it was the inaccessibility of rectal cancer, rather than its peculiar malignancy, which made operative failure so lamentably common; if the technical procedure could be improved, the remote consequences could be satisfactorily controlled. The introduction of antiseptic methods had already aided, but very imperfect control of hemorrhage because of the small space in which the surgeon was obliged to work, and the great length of time the patient was obliged to remain under the anesthetic, still kept the death rate high. Indeed, Volkmann's greatest contribution was not the result of professional labor and study, but came as a simple accident, which opened the way for a greater than he, to solve the chief problems which then harassed the rectal surgeons.

In the year 1883, while Volkmann was engaged in removing a periosteal sarcoma of the sacrum, he accidentally broached the sacral canal. No untoward symptoms were displayed by the patient who had suffered what was then regarded as a very grave injury, and the young man who, as Volkmann's assistant, witnessed the accident and the prompt recovery of the patient despite it, was led to wonder, and then to experiment, to find out if the sacrum might not, if need arose, be safely invaded under proper precautions. As a result of his investigations and clinical observations, this young surgeon, whose name was Kraske, published in the year 1885, a paper which inaugurated a new era in rectal surgery. He went so far beyond the work of Kocher, or indeed anything which had previously been attempted, that the surgical world stood aghast at his boldness. He excised the left half of the lower portion of the sacrum as high as the third sacral foramen. He was thus enabled to enter the intestinal canal much further up than ever before, and gained access to practically any rectal tumor from above. Hemostasis could now be readily attained, and separation of the rectal ampulla could be rapidly and almost bloodlessly accomplished. Twelve years later Kraske was able to report eighty patients treated by his radical method. In his first publication he had told of ten cases with four deaths, and when it was noised abroad that his mortality was forty per cent, the enthusiasm for his method rapidly waned. Yet in his first five years the number of cases increased to twenty-nine, while the deaths amounted to but ten, lowering the mortality to 34.5 per cent. In the succeeding seven years, as his skill increased, and general surgery advanced in every department, he added fifty-one cases, among which there were but five deaths, so that the mortality of this later part of his experience fell to 9.8 per cent. This means, of course, immediate mortality. In the report made in 1897 we find that twenty-two of the patients included in the entire series died of recurrence, with or without metastases, in from six months to twelve and three-quarters years after operation, and but fifteen patients were alive and free from recurrence—having variously survived

from nine months to eight and one-half years after operation.

Kraske's success was, on the whole, so much better than that of any of his predecessors that confidence in his radical extirpation gradually increased, and in both hemispheres surgeons strove to combat the ravages of this peculiarly fatal form of malignancy. All procedures of this general type are even yet known as "Kraske's," though numerous modifications were soon applied to the original conception. Bardenhauer and others extended the excision still further, and Keinecke, Roux and Rehn strove to preserve the bone by doing merely a temporary resection. Zuckerkand varied the procedure by making a parasacral incision. In a comprehensive paper published in 1895, Gerster, who was German born and educated, though ranked as an American, traced the modifications and improvements which Kraske's original maneuver had undergone during the time of his own professional activities. Great as were the advantages of this procedure, he tells us, the mutilation involved and the weakening of the pelvic floor which it engendered, soon induced others to try to improve upon it. The median longitudinal incision was first modified by Heinecke, who made a T-shaped one instead, dividing sacrum and coccyx along the lines of the external incision, thus producing two lateral triangular osteo-integumental flaps, which were replaced and sutured after the rectal operation had been completed. Heinecke's operation was modified by Kocher with a view to enabling the surgeon to divide the sacrum above the third sacral foramen without injury to the third and fourth anterior sacral nerves. Another innovation of the manner of approaching the bowel was made by Levy, who recommended an incision shaped like an inverted U, the looped extremity corresponding to the transverse section through the sacrum, the square flap being turned down toward the anus. His object was to avoid injury to the fourth sacral nerve and to the levator ani which it supplies, as such injury is often responsible for subsequent collapse of the rectal stump. Levy's incision, however, restricted the surgeon's "elbow-room" and gave limited opportunity for drainage. Hegar employed a V-shaped osteo-integumental flap, the basis of the triangle corresponding to the section through the sacrum, this last being accomplished subcutaneously with the aid of a chain-saw.

After an experience in Albert's clinic which included thirty-two cases, Hochenegg, of Vienna, recommended a parasacral incision, commencing at the median line of the sacrum just below the third foramen, and describing an outward curve passing the median line a second time just below the apex of the coccyx. Should it be desirable to excise the anus, this end of the incision bifurcates near the coccyx, uniting again at the perineum. The sacrum was excised as in Kraske's original method. It was Gerster's opinion that the objection to Heinecke's and Kocher's complicated wounds is

counterbalanced by the advantages which accrue from preservation of the lateral blood supply, which is destroyed by Hegar's incision. Though Hegar thus compromised the vitality of the resected bone, his plan afforded excellent drainage. Levy's incision he felt was "objectionable in every way," chiefly because of limitation of space and defective drainage.

Some eight years after Gerster wrote, Charles H. Mayo pointed out that the chief difficulties which faced the German surgeons "arose from shock, which usually meant loss of blood; from peritonitis, as two-thirds of the Kraske operations necessitated opening the peritoneum; and from the attempt to perform radical operations on inoperable cases, as the damage to the bone, loss of blood and open peritoneum were necessary by this method, before the operator knew fully the extent of the disease. The anus had usually to be sacrificed; now, where possible, attempts were made to preserve this outlet. Various methods of uniting the distal and proximal bowel were devised. Suture methods frequently failed, or partially failed, leaving permanent fistulae, as did all methods much too often, were they plastics, Murphy buttons or invagination. The Hochenegg method of invagination by passing the proximal end through the anus and suturing the skin, was later modified by removal of the mucous membrane of the anus. One of the best methods was to draw the proximal bowel through the anus which was inverted, and make a circular suture union, which is replaced within the sphincter. Lange made a half circular incision anterior to the anus, admitting of its being depressed two inches to reach the proximal end. With the anus saved, it was often found that the extensive mutilation had permanently injured its nerve supply, and when saved intact, that it required the levator ani and internal sphincter to render it functionally perfect in preventing the sudden escape of gas and thin feces."

The results of operative measures of all kinds, up to the time he wrote, were carefully tabulated by James P. Tuttle, of New York, an American pioneer in rectal surgery, in 1897, some fifteen years after Kraske's method first came into use. He collected 487 cases operated previous to 1885, when perineal methods were in use, finding the immediate mortality 22.4 per cent. He regarded this as "not high, considering the period," though as all the growths were near the anus, there was no exact comparison with later work. Five hundred and twelve cases were collected which had been done "after the advent of antisepsis and the publication of the epoch-making paper of Kraske. From these there is a mortality of twenty per cent." A third series Tuttle obtained by communication with individual operators, gathering 259 cases—including eight of his own—occurring all over Europe and the United States. The immediate mortality of this most recent series was 11.7 per cent, which the author thought gave us "much to encourage our hope that this mortality will

eventually be so reduced as to disarm the criticism of those who still hold that it is unjustifiable on account of its danger." So sanguine, indeed, had Dr. Tuttle become that he concluded by saying that he would answer the question which formed the sub-title of his paper, "What has modern surgery accomplished in the treatment of cancer of the rectum?" by saying: "It has cured it, conquered all its disgusting features and relieved its pain, doubled and more the lease of life, and at comparatively small risk has given the hopeless hope, not timorous and vague, but well founded, and which grows stronger and more confident every day they live without recurrence."

Thirty years have passed since Tuttle made this optimistic pronouncement. I gravely doubt if any surgeon rising today in a medical meeting would claim as much for any method ever devised for the control of rectal cancer. Ten years thereafter, Harrison Cripps, perhaps the best known English surgeon who has given special attention to this disease, found "from an extensive experience that the cases of rectal cancer which fulfill the condition rendering an excision advisable amount to about thirty per cent of cases coming under observation."

The remaining seventy per cent of rectal cancer victims whom their medical attendants deemed unsuitable for operation were treated by various palliative methods, among these colostomy being perhaps the most regularly employed. The advantages of colostomy are summed up by Cripps as: "First, it is an absolute security against death from obstruction with all its horrors; secondly, it affords relief to some of the most troublesome symptoms; lastly, it retards to some extent the rate of growth of the disease." He discusses the supposed miserable condition of the individual who is compelled to depend upon an artificial anus, and concluded that "with the many opportunities of watching cases in which colostomy has been performed and others where Nature has been allowed to run her course, I have no hesitation in saying that the relief obtained and the suffering avoided are unmistakable, and leave me in no doubt as to the great benefit of the operation."

Already when Cripps wrote, the discovery of Konrad Roentgen had offered some palliation to those sufferers for whom the surgeon had no hope. When the work of the Curies began to see results in clinical medicine, still another agent for their relief was brought forward. Surgeons, however, were very loathe to admit that x-ray and radium might be of lasting service in cases where they themselves were powerless. For example, in 1922 we found Robert C. Coffey, one of the best known of American rectal surgeons, saying, "The remarkable success of radium in the treatment of cancer of the uterus has led us to hope that the same might be true of cancer of the rectum. We have been greatly disappointed. A satisfactory reason for our failure to get good results in cancer

of the rectum has not been given. Hochenegg's clinic reports more than seven hundred cancers of the rectum treated. Of these, twenty-eight were treated by radium and only one gave good results. Many were made more uncomfortable and were worse than if no treatment had been given. Some other clinics have had equally disappointing results."

The technique of rectal surgery underwent steady improvement side by side with the wider application of radiation to cancerous lesions generally. Lockhart-Mummery, writing a little less than two years ago in the *British Journal of Surgery*, notes that "the operation for the removal of rectal cancer has undergone very considerable changes during the last twenty-five years." Roughly dividing this period into four epochs, he suggests the advances by stating that during the first epoch surgeons removed the growth by splitting up the rectum and dissecting it out, working from inside the rectum, or at least with a finger in the bowel. This was followed by the Kraske epoch when the incision was made over the rectum from behind, with removal of a portion of the sacrum. "Serious sepsis was inevitable after these operations, and the successful cases as regards recurrence were usually those where the subsequent sepsis removed extensions of the growth which the operation failed to do. The mortality was high, and the functional results as a whole very poor."

The third epoch Lockhart-Mummery designates as that of the abdomino-perineal operation, which he regards as a decided improvement of any that had gone before. "It fulfilled two important factors which had hitherto been lacking—a free removal of the growth and surrounding tissues, and a technique which made it possible to eliminate sepsis. At first the operation was designed so as to allow the end of the colon to be brought down to the anus, and more or less normal function to be restored; but it was soon found that this added serious dangers to an operation which was already very risky. It is not possible to ensure an adequate blood supply to the transplanted colon, and this method has now been almost universally abandoned in favor of terminating the operation with a permanent colostomy. While the operation is a great improvement upon its predecessors, it has certain serious drawbacks as a routine method of removing rectal cancers. The mortality of the operation, even in the hands of experienced operators, is very high—in any large series of cases it is thirty per cent or over, and it cannot be performed on people over sixty years of age, or where there are complicating conditions—in fact, the mortality can only be kept down at all to a reasonable level by a very careful selection of cases." He goes on to say that as most rectal cancer patients are past sixty and very likely to have a complicating disease, the uses of the operation are decidedly restricted; moreover, "a mortality of anything near thirty per cent cannot be faced with equanimity."

Lockhart-Mummery himself routinely uses a perineal resection, and in presenting a series of two hundred cases claimed a three per cent immediate mortality, and fifty per cent of five-year cures. Some years ago Coffey wrote that in his earlier work he had faithfully followed the lead of the Mayo's, which consisted largely of "a coordination and clinicalization of the best methods of European and American surgeons with their own original work." He was later influenced by Miles and Lockhart-Mummery in England and Jones of Boston, who had varied the established technique. Using the old Kraske procedure, the Mayos reduced their mortality about twenty-five per cent but it was not until a two-stage operation was introduced that the frightful consequences showed any great tendency to decline. But regularly doing colostomy, preliminary to the radical operation, the mortality fell to fifteen, or even as low as ten per cent with the most skillful operators. In 1924 we find Coffey almost as sanguine about the control of rectal cancer as was Tuttle twenty-seven years earlier.

Despite the cheerful tone of enthusiastic supporters of various procedures the total percentage of death due to rectal cancer still remains distressingly high, and anyone who has perused much literature in regard to the subject of rectal cancer, no matter what his bias, will come eventually to agree with Lockhart-Mummery that it would be advantageous to work out tables from a number of large series of operated and un-operated cases, so that we might know exactly where the whole question of treatment stands, *but* that such tables "would show such a relatively low percentage of cures out of the total that they would be depressing reading."

The introduction of the Percy cautery gave hope that rectal malignancy might prove especially susceptible to extirpation by such an agent. Improvements in the technique of diathermy led many therapists to attempt its application in the rectum. In general, the results have been disappointing, although enough isolated cures have been reported from time to time to make quite an imposing total when duly tabulated. Heat treatment in any form cannot yet be hailed as the ideal method of getting rid of cancer of the rectum. Neither has x-ray alone served to bring about many cures. Used in conjunction with surgical removal it seems to be effective in controlling extension to the lymphatics, but as rectal carcinoma does not metastasize as rapidly as many other forms of malignancy the precautions against its spread to other organs are not of such paramount importance as in cancer of the prostate or penis, for example. Deep roentgentherapy has found a definite place in the therapy of cancer of the lower bowel, but the perfect curative agent has not been found in the x-ray.

Radium on the whole has been of greater service, and it seems likely that in the future, improvements in the technique of its application may make

it even more useful than is at present thought possible. The disrepute into which radium treatment of intestinal malignancy fell a few years ago, was unquestionably due to poor technique. In a review of the whole question about two years ago, Muir pointed out that successful radiation in rectal cancer depended upon three factors: (1) Accurate estimation of the extent of the lesion, so that all parts of it may be adequately exposed to the therapeutic rays; (2) sufficiently high dosage to destroy all the proliferating malignant cells without inflicting injury upon adjacent healthy tissues; and (3) the avoidance of all caustic action upon any of the tissues, so that there will be absolutely no danger of fistula formation, nor any of the dreaded sequelae which have, in the past, so often attended the use of radium in the lower alimentary canal."

Those who are called upon to use radium in rectal malignancy usually suffer under the disability of being called in as a "last resort." Most of their cases are recurrences after surgical removal, or show lesions which when first recognized were beyond any hope of extirpation by surgery. Because it is so peculiarly insidious, rectal cancer does not cause symptoms until it has gained considerable headway, and even when symptoms do appear they are likely to be misunderstood and misinterpreted today, just as they were in Morgagni's day. So the radium therapist seldom sees anything but "late cases," and until recently his equipment was but ill suited to permit him to cope with tissues already sloughing and subject to advanced secondary infection. The surface applications first used proved of little use, and the great difficulty of holding the applicators in approximation with the lesion made the whole procedure "hit-or-miss" and generally unsatisfactory. The few cures which resulted were probably more lucky accidents than anything else. After Janeway studied the method of intratumoral implantation suggested by Duane of Boston, and applied it to cancer of the rectum, the results at his hospital—the Memorial, New York—showed an almost immediate improvement. The applicators used, however, were at first tiny capillary glass tubes which had no metal filtration. Though these contained but little radium emanation so that the burning about each tube was reduced to a minimum, it was necessary to use so many tubes that the sum total of tissue exposed to caustic action was considerable, and though the incidence of sloughing and fistula formation was lessened, it was not wholly abolished.

Finally Quick produced a capillary tube made of gold which did the work of the glass tube, but did not burn, and about the same time Muir called the attention of the profession to a platinum-sheathed tube with an attached thread which makes it possible to pull it out when the desired amount of radiation has been given. Muir's tube is considerably superior to Quick's as the gold tube cannot be securely sealed against leakage of unfiltered

radium emanation, and must be left in the tissues after the contained radium has all been given off. In rectal work these foreign bodies, tiny as they are, are especially objectionable, but the Muir "seed" is proving very effectual in rectal cancer, and seems to give promise of still further improvement in applying radium to the malignant rectum.

Unfortunately the symptoms of cancer of the rectum, as symptoms of most cancers, are in the beginning not pronounced enough to call the attention of the patient to any particular disturbance, as some of the first symptoms are increasing constipation with general gastro-intestinal disturbance such as gas, indigestion and so forth. Sometimes the first real indication of trouble is a slight bleeding, the blood being red or significant of lower gastro-intestinal pathology. As the disease progresses diarrhea alternates with constipation and later when there is a stenosis of sufficient degree, there is a liquid discharge of feces because of the fact that the solid feces cannot pass the obstruction but by this time there are general symptoms of serious disturbance such as increased hemorrhage, discomfort, pressure in the rectum and increased symptoms of chronic obstruction. Tenesmus and straining is rather a constant, persistent and distressing symptom of rectal cancer, this usually increases as the tumor enlarges and the obstruction increases. Pain as such is usually a rather late manifestation of malignancy of the rectum as it does not occur until the mass is quite large and metastasis and pressure of the primary tumor has occurred. The location of the sight of the primary growth if on the posterior wall of the rectum, causes pain in the limbs and sacro-iliac region; if in the anterior wall causes bladder, prostatic and urethral disturbance with pain in the perineum. The discharge, which at first is a bloody stain, becomes as the growth increases with ulceration, more profuse, being a mucoid bloody discharge increasing in amount and as the destructive and degenerative process goes on, contains blood, mucous and debris with a very offensive odor and very irritating to the skin around the anus, causing great discomfort.

Death from hemorrhage of a rectal carcinoma is rather rare.

As has been mentioned before, the decreasing lumen of the bowel causes a gradually increased abdominal distention with tenderness. Metastasis of the rectal growth is usually of the lymph glands adjacent to the primary growth first. We have the sacral, lumbar, rectal, peritoneal, mesentery lymphatics invaded as a complication of the rectal and lower sigmoidal carcinoma. The other organs most usually involved are liver, lungs, kidneys and ovaries, uterus and omentum. The extension of the rectal neoplasm very frequently involves the nerves of the lower extremities, causing severe pains in the legs.

The diagnosis of this disease is, of course, not difficult when patients usually show up for examination. If these patients would attach the proper

significance to the symptoms of increasing constipation and slight bloody discharge early, it is quite possible that a much lower mortality rate and a higher rate of cures would be the rule rather than the exception. The difficulty alone lies with the patient and sometimes with the attending man in that some cases are diagnosed as hemorrhoids when they are in reality beginning malignant disease. If the patient is carefully examined and the symptoms of malignancy, as are given by our text books, remembered, it is not a difficult thing to diagnose the disease.

The development of the best surgical procedure for the removal of the disease from the beginning of surgery on the rectum, you have heard in the beginning of this paper. The mortality rate has been decreased greatly but is still very high and these patients, many of them, are left with an inguinal colostomy to finish up their remaining days, which frequently for many of them, is not long. With the proper technique a colostomy is not so bad, in that very frequently these patients have two stools a day when they have had their muscles retained so that they still have a sphincteric action of their abdominal anus.

Several years ago, Dr. Thomas B. Noble originated the idea of an anastomosis of the rectal segment to the lower sigmoidal segment by means of an ingenious modification of a Murphy button. This operation, of course, necessitates an abdominal and rectal technique. The abdomen is opened after the thighs, pubis, perineum, buttocks and rectum have been surgically prepared with bowel previously having been thoroughly emptied of its contents; the growth is dissected free in its entire circumference, the peritoneum being incised on either side and the dissection upward and behind the mass completely encircling it, after which a clamp is placed well below the malignant mass, and just above it a stay suture or clamps is placed on the lowermost segment and the rectum is incised below the clamp and adjacent to the lowermost portion of the tumor mass; the mass is then lifted upward and outward, out of the abdomen and gauze packing placed into the lowermost opening of the segment and hemorrhage controlled along the cut edges. Next the mass is then divided above the upper clamp and the hemorrhage again controlled along the cut edges of the sigmoid and the male portion of the Murphy button is next sutured into this upper segment with a circular suture which puckers the cut end of the sigmoid below the phlange of the button; the next procedure is the placing of the female portion of the Murphy button into the lower segment of the rectum and likewise a circular suture placed around this cut edge which in turn puckers this particular portion of the rectum over the other portion of the Murphy button. The male portion of the button is then inserted into the female portion and the two parts approximated and brought together tightly by a nut on the male portion which screws down against the female tube, tightening the two phlanges of the

Murphy button so that there will be no leak. At times several stitches are taken around this anastomosis but this is not necessary as the healing will occur without, and from five to ten days the patient passes the tube, when they survive the shock of the operation. This, in my opinion, is the operation of choice where it can be used.

I wish to report a case operated by Dr. Noble for me, a Mrs. M.

This patient had been operated previously years ago for an appendectomy and suspension and again about five years ago for hysterectomy for fibroid. Following her operation five years ago, she had been perfectly well as far as she knew, up until three or four months previous to her seeing me, at which time she began to have a slight bleeding at stool with an uncomfortable sensation in the pelvis. She came in to me and on examination I made a diagnosis of a malignant growth, and advised her to see Dr. Noble which she did, he confirming the diagnosis. She was operated, after having been thoroughly cleansed out by technique just described. She left the table in very poor condition with a very fast pulse rate and in severe shock but by salt and glucose injection and other supportative measures, in twenty-four hours was out of the woods and made a very nice recovery. This was about fourteen months ago. Following this operation there was a stricture which necessitated dilatation over a period of several months. Three months ago, after not having seen her for a period of four or five months, she came in saying that she thought she had some more trouble. Examination revealed a recurrence at the sight of the anastomosis. She was again referred to Dr. Noble and she was sent to the hospital and this recurrence cauterized. Cauterization has been done the second time and patient is apparently free from recurrence now which is, of course, too early to feel that this woman is permanently cured.

I can recall, however, many of the cases that I have assisted Dr. Noble in doing during my years with him and know that many of them were apparently cured permanently although, of course, some of them had recurrences.

This particular type operation is not a mutilating one, does restore continuity of the rectum, does away with the necessity of an inguinal colostomy, therefore, being a much more comfortable and cleaner operation and I would say that the mortality rate, with morbidity and recurrence, is probably as good if not better than in the other type operation.

ETHYLENE

Following the explosion in Evansville, supposedly due to ethylene, Moses Salzer, Cincinnati (*Journal A. M. A.*, June 22, 1929), undertook an investigation. He found that the quantity of ethylene capable of explosion at any one time is too small to produce any considerable damage. A nation-wide survey of more than 425,000 ethylene anesthetics shows a remarkably favorable record. He concludes that ethylene is probably as safe as ether, if not safer.

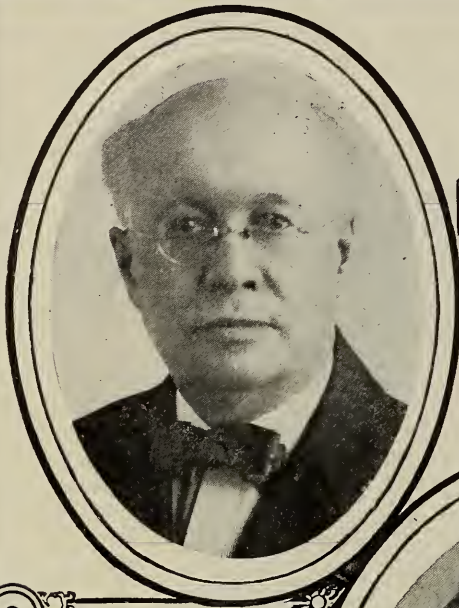


CHARLES E. GILLESPIE

Seymour

President Indiana State Medical Association

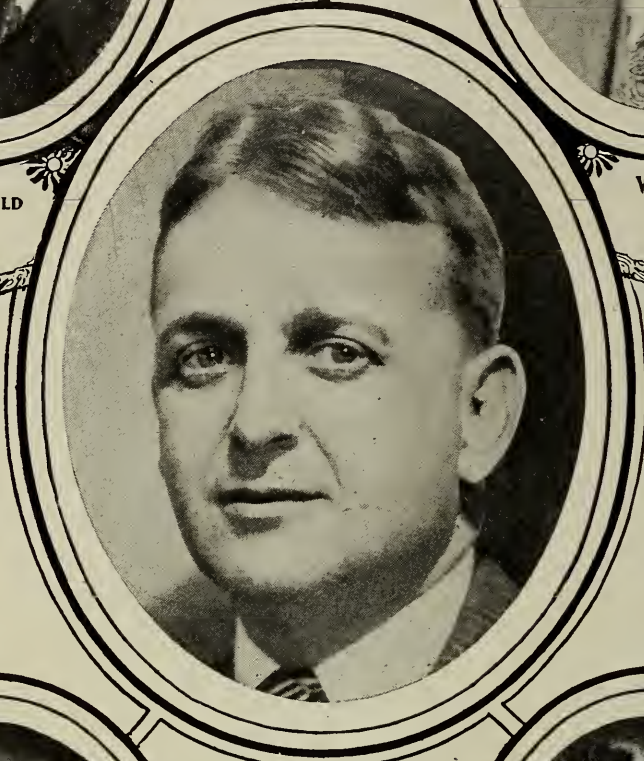
1929



ANGUS C. McDONALD
PRESIDENT-ELECT
WARSAW



WILLIAM DOEPPERS
TREASURER
INDIANAPOLIS



MR. THOMAS A. HENDRICKS,
EXECUTIVE SECRETARY,
INDIANAPOLIS



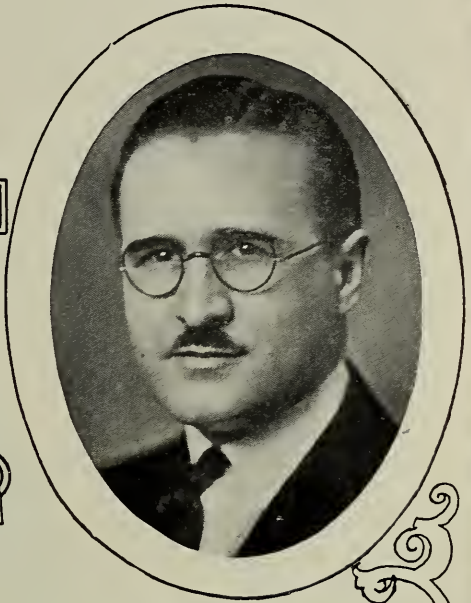
ERNEST RUPEL
CHAIRMAN SECTION ON SURGERY
INDIANAPOLIS



H. C. KNAPP
CHAIRMAN EAR, EYE, NOSE AND THROAT SECTION
HUNTINGBURG



ROScoe H. BEESON
CHAIRMAN SECTION ON MEDICINE
MUNCIE



CLEON A. NAFE
SECRETARY SECTION ON SURGERY
INDIANAPOLIS



B. D. RAVDIN
SEC. EYE, EAR, NOSE AND THROAT SECTION
EVANSVILLE



HARVEY L. MURDOCK
SECRETARY SECTION ON MEDICINE
FORT WAYNE

THE EVANSVILLE SESSION

Evansville will be host to the eightieth annual session of the Indiana State Medical Association, Wednesday, Thursday and Friday, September 25, 26 and 27, 1929. The entire citizenry of Evansville cordially welcomes you, and the local medical society invites you to be its guests. Those in charge do not wish to appear boastful, but at the same time they have an objective in mind, and that is to carry on the record heretofore made of having each convention a little better, if possible.

THE CITY

Evansville's advantages are many, varied and outstanding. The first of these is its location. It is ninety miles south by west of the center of the population of the United States. It is in the center of a wonderfully fertile and productive agricultural district. From the rich fields of the Tri-state area and of the Ohio River Valley comes a production of grains which is practically unequaled in the Middle West. The district surrounding Evansville also produces thousands of dollars worth of livestock each year. Besides being a great dairy section, many of the farmers around Evansville are engaged in raising swine, sheep and various other animals, and in the past few years poultry raising has become one of the leading industries of the farming sections. Evansville also is situated in a very rich mineral field. Thirty million tons of coal are mined annually within a radius of fifty miles of Evansville. There are two coal mines within the corporate limits of the city and more than 150 mines and 496,000 acres of undeveloped coal lands within fifty miles of Evansville. These lands and mines are capable of producing nearly three billion tons of coal, which fact makes for cheap fuel, power, gas and water rates. In addition to the coal deposits found near Evansville, other mineral resources such as fluorspar, iron ore, limestone, rock asphalt and gravel are found in rather large quantities in the Tri-state area, and this vicinity also produces a large quantity of oil. The oil industry promises to become almost as great an industry, in this section, as the coal industry is now. New oil producing wells are being brought in weekly and more acreage is being leased each day by large and responsible oil companies.

The city of Evansville has approximately two hundred and thirty-five industries of a diversified nature at the present time. Evansville long has been known as having the largest furniture man-

ufacturing center in the country. It also is noted as having the largest cigar factory in the world under one roof. The largest manufacturer of infant foods in the world also is located here. Other products manufactured in Evansville are stoves, bricks, auto trucks, auto bodies, steam shovels, electric and gas refrigerators, gas engines, agricultural implements, tools, glass bottles, brooms, electric headlights and grain products.

There are twelve national and state banks in the city with a total capitalization of \$2,750,000 and a surplus of \$3,507,000. The bank clearings for 1928 were \$276,622,389. Evansville also enjoys all modern recreational facilities and large play grounds, properly superintended natural parks (with lakes containing game fish) swimming pools, tennis courts, golf courses, bathing beaches and theatres.

Evansville offers much in the way of education. There are eighteen elementary schools, twelve parochial schools, two modern colleges, two music schools, and five high schools in the city. In addition, Evansville College, one of the outstanding educational landmarks of southwestern Indiana, furnishes those who wish it courses in liberal arts, engineering, business administration, music, education, science and theology. There recently has been added to the city's educational facilities a zoo which will give the public in

general a liberal education in natural history.

A municipally owned, modern and up-to-date airport, comprising 254 acres, now is under construction and will be completed within a few months. Evansville is the headquarters of the Interstate Air Lines, Inc., which in itself is evidence of the fact that Evansville occupies a very important place in present day as well as future aviation. An air mail line now is in operation between Chicago and Atlanta, and from Evansville to St. Louis. It is probable that this route will be extended to Louisville in the near future, and that an air mail line soon will be a reality from Evansville to the southwest. Thus, Evansville will be a real hub of aviation, or, as Evansville's slogan indicates, "The air cross roads of America." An ærological observatory, under the jurisdiction of the U. S. Weather Bureau, will be established shortly, which will permit the gathering and dissemination of weather data for use by aviators, and is another indication of the value



GARDNER C. JOHNSON
Chairman Committee on Arrangements
Evansville

placed by the government on Evansville's location as an aeronautical center.

HOTEL ACCOMMODATIONS

Visitors in Evansville will find ample hotel accommodations. The headquarters hotel, the McCurdy, is situated on the river front, overlooking the majestic Ohio. Within view of the hotel is a park skirting the river for a distance of nearly a mile. A corps of assistants will remain at headquarters, where everyone is urged to register and attend to their reservations. A bureau will be maintained in the hotel, where information con-



HOTEL MCCURDY
Headquarters for the Evansville Session

cerning convention activities may be obtained. Directly across the street from the hotel is the beautiful Elks' Club, one of the first built in the state of Indiana and still regarded as among the finest. The Vendome Hotel is farther away, but is beautifully situated and commodious.

GOLF

Golfers are sure to be delighted with the courses offered by the convention city. The Evansville Country Club is situated north of the city, within a short ride of the hotel district, on hills overlooking the valley in which the city lies. There is a beautiful clubhouse and swimming pool.

The Municipal Golf Course, where the convention tournament will be played, lies just west of the city and adjacent to the car lines, and Evansville golfers like to think of it as the most beautiful municipal course in the state. It is a part of the park system. Those wishing to partake in this tournament should send their names to Robert R. Acre, M.D., 200 American Trust Building, Evansville, who will make proper arrangements.

VANDERBURG COUNTY HOSPITALS

Deaconess Hospital is located at the corner of Harriett and Delaware, a five-minute ride from the hotel district, and on one of the main car lines of the city. The hospital is controlled by the Deaconess Association, has 140 beds, large operating rooms, and a recently completed new wing.

St. Mary's Hospital is just a block from the Deaconess Hospital. It has 112 beds, probably

the largest operating rooms in the city, and it also has a new wing which was completed recently.

Walker Hospital is a private institution situated in the downtown district, three blocks from the Hotel McCurdy. Its chief surgeon and superintendent is Dr. James Y. Welborn. It has over one hundred beds, and, like the others, a large laboratory and excellent operating facilities.

The Vanderburg County Tuberculosis Sanatorium is situated on a beautiful hill to the west of the city, a fifteen-minute ride by automobile from the hotel. It is controlled by the county, but originally was built through the assistance of various charitable organizations, and under the guiding hand of the former Congressman John W. Boehne. For many years it was known as Boehne Camp, in honor of the chief donor, and still is referred to in that way by residents of the city.

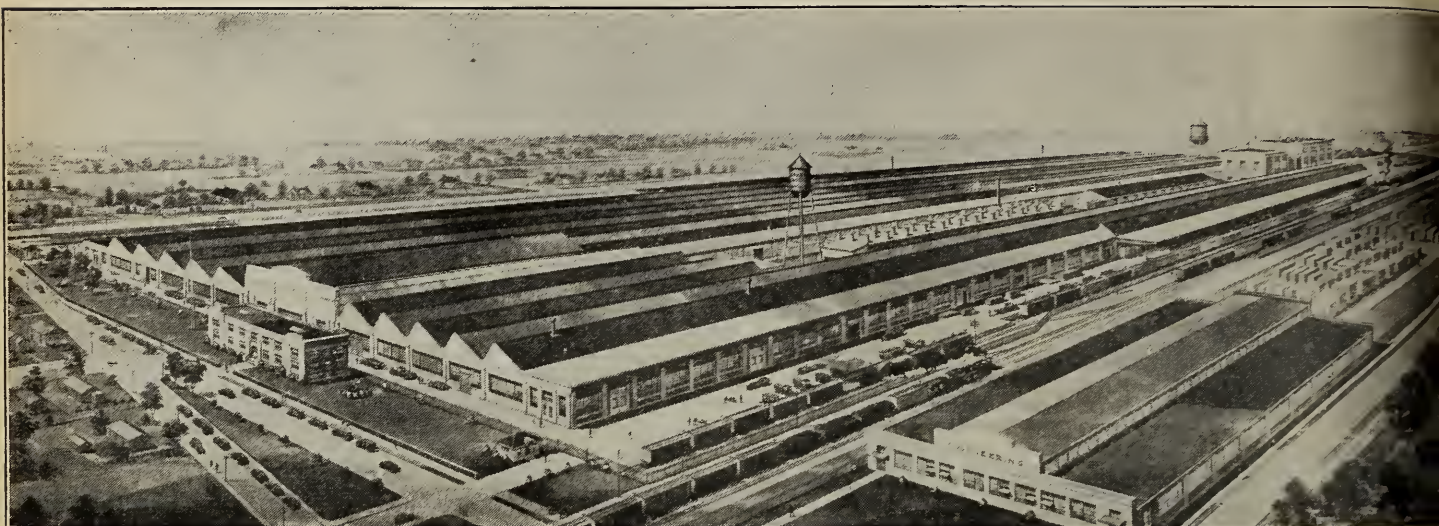
ENTERTAINMENT

The annual golf tournament will be held at the Municipal Golf Course, Wednesday morning, from 9 a. m. to 5 p. m. There will be a luncheon for doctors and their wives at the Evansville State Hospital as guests of C. E. Laughlin, M.D., medical superintendent, Wednesday, September 25, at 12:30 p. m. A steamboat ride on the Ohio



NEW VENDOME HOTEL

river is being planned by members of the Vanderburg County Medical Society, Wednesday evening, 8:00 to 11:30 p. m. Smoker, distribution of golf prizes, cards and other amusement features will prevail. Fraternity and class luncheons are being arranged. The World War Veterans' luncheon will be held Thursday noon, September 26th. The banquet for physicians, wives and guests will be held in the ballroom, eighth floor, Hotel McCurdy, Thursday evening, September 26th, at 7:00 p. m.



FACTORY OF SERVEL, INC.



EVANSVILLE COLLEGE



BOSSE FIELD STADIUM



SHRINE MOSQUE, EVANSVILLE

LADIES' ENTERTAINMENT

The Woman's Auxiliary is making extensive plans for the wives of the visiting physicians. There will be sight-seeing trips about the city, luncheon at the Country Club, and other activities. There will be a special table for women physicians at the breakfast meeting of the Woman's Auxiliary, Thursday, September 26th, at 8:15 a. m., Pompeian room, Hotel McCurdy. Dr. Arthur J. Cramp, director of the Bureau of Investigation of the American Medical Association, will address this meeting, his subject being "Mrs. Gullible's Travels in Cosmetic Land." Mrs. Frank W. Cregor, of Indianapolis, will give a report on the Portland session.

CENTRAL STANDARD TIME

Evansville operates on Central Standard time, and the time given on the program throughout is based on this fact.

OFFICIAL CALL TO THE HOUSE OF DELEGATES

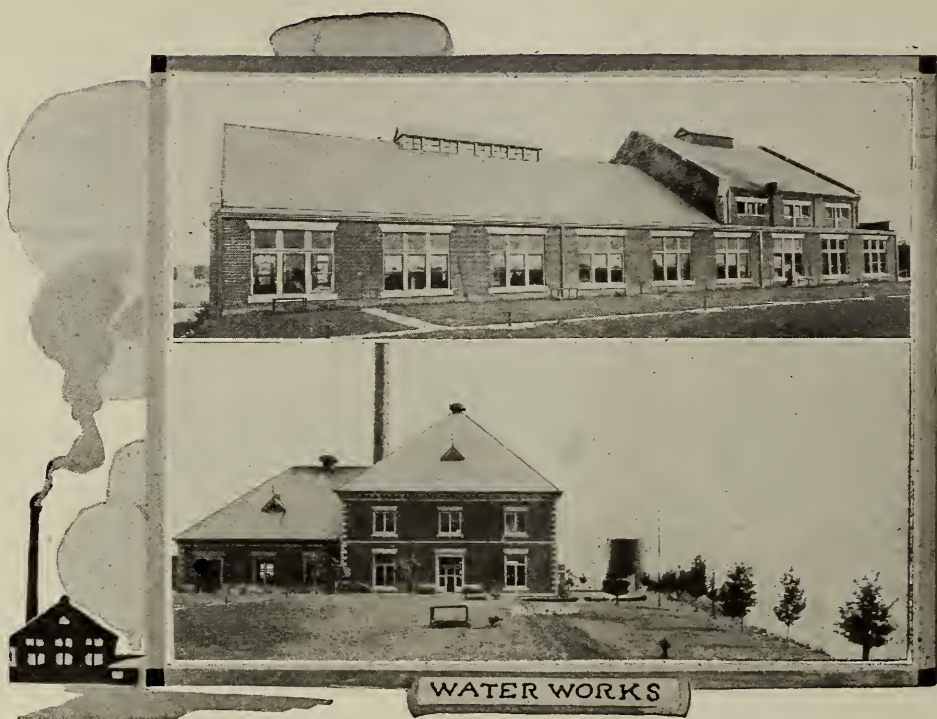
The next annual session of the Indiana State Medical Association will be held at Evansville, September 25, 26 and 27, 1929.

The House of Delegates will be constituted as

follows: Marion County, nine delegates; Allen County, two delegates; Lake County, four delegates; St. Joseph County, three delegates; Vanderburg County, two delegates; Vigo County, two delegates; the other seventy-six county societies each one delegate; thirteen councilors; the ex-presidents, namely, G. F. Beasley, C. S. Bond, M. F. Porter, W. N. Wishard, J. C. Sexton, G. W. McCaskey, J. B. Berteling, G. T. McCoy, Joseph R. Eastman, W. H. Stemm, C. H. McCully, David Ross, W. R. Davidson, C. H. Good, Samuel E. Earp, E. M. Shanklin, Charles N. Combs, Frank W. Cregor and George R. Daniels. In addition to these, the president, secretary and treasurer, and the editor of *THE JOURNAL*, all without power to vote except in case of a tie, when the president shall cast the deciding vote.

Blank credentials have been sent by the secretary to each county society, and the properly executed credentials should be mailed to Thomas A. Hendricks, 804 Hume-Mansur Building, Indianapolis, or brought to the session. No delegate will be seated unless wearing the official badge.

The House of Delegates will convene promptly at 4:00 p. m. Wednesday, September 25th, in the Pompeian room of the Hotel McCurdy, and again at 7:00 a. m. Friday morning, September 27th,



EVANSVILLE WATER WORKS



KNIGHTS OF COLUMBUS BUILDING, EVANSVILLE

in the Pompeian room of the Hotel McCurdy (breakfast meeting).

The order of business will be as follows:

- 1. Call to order by the president.



DEACONESS HOSPITAL

- 2. Roll call and seating of qualified delegates.
- 3. Reading of the minutes of previous meetings.
- 4. Appointment of reference committees.



BOEHNE HOSPITAL, EVANSVILLE

- 5. Report of the executive secretary.
- 6. Report of the treasurer.
- 7. Report of the chairman of the council.
- 8. Report of standing committees:
 - a. Credentials.
 - b. Executive.
 - c. Public Policy and Legislation.
 - d. Bureau of Publicity.
 - e. Medical Education and Hospitals.
 - f. Scientific Work.
 - g. Necrology.
 - h. Industrial and Civic Relationship.
 - i. Delegates to the A. M. A.
 - j. Arrangements.
 - k. Diphtheria.

- l. Budget.
- m. Postgraduate Study.
- 9. Reading of Communications.
- 10. Reading of Memorials and Resolutions.
- 11. Unfinished Business.
- 12. New Business.
- 13. Adjournment.

The election of officers will be the first order of business Friday morning, at 7:00 o'clock. In addition to the regular officers, the terms of the following officers expire December 31, 1929, and their successors must be elected at the session: Delegates to the American Medical Association to succeed Albert E. Bulson, Fort Wayne, E. M. Shanklin, Hammond, and alternates, Donald C. McClelland, Lafayette, and B. G. Keeney, Shelbyville, to be elected for the ensuing two years.

Member of the Committee on Publicity to succeed J. A. MacDonald, Indianapolis, for the ensuing three years. Member of the Committee on Medical Education and Hospitals to succeed S. E. Earp, Indianapolis, for the ensuing three years.

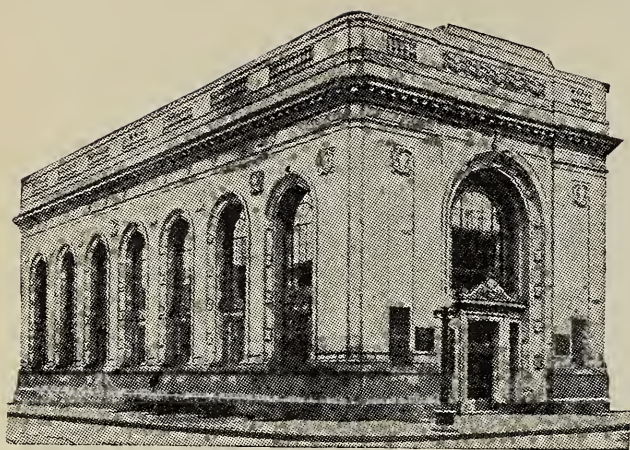
Delegates from the first, fourth, seventh, tenth and thirteenth districts are reminded that the

terms of their councilors will expire December 31, 1929, and new councilors should be elected to

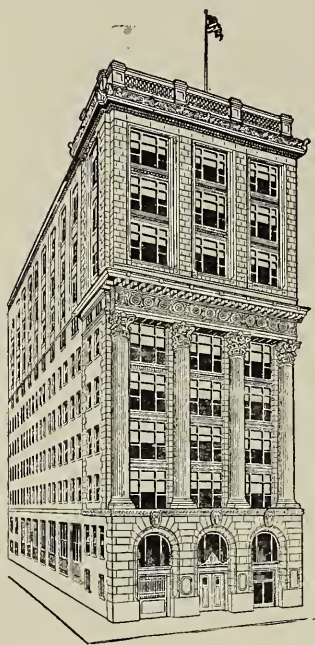


WALKER HOSPITAL

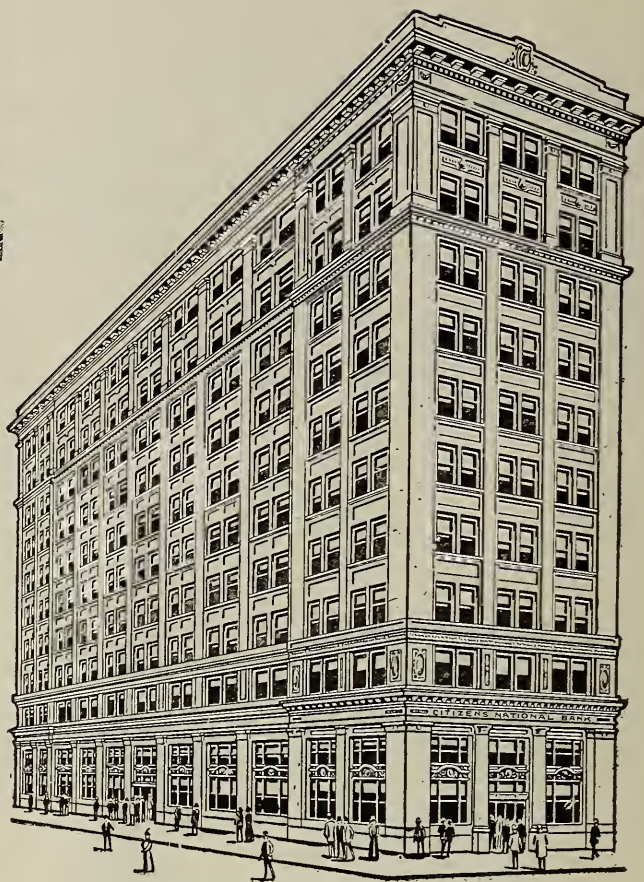
succeed the following:
First district: John H. Hare, Evansville.
Fourth district: H. P. Graessle, Seymour.



THE NATIONAL CITY BANK



OLD NATIONAL BANK



CITIZENS NATIONAL BANK



Y. M. C. A., EVANSVILLE

Seventh district: E. E. Padgett, Indianapolis.

Tenth district: E. E. Evans, Gary.

Thirteenth district: H. M. Hall, New Carlisle.

Some of these elections may already have been held but should be reported to the House of Delegates at this session for confirmation.

THOMAS A. HENDRICKS,
Executive Secretary.

ANNOUNCEMENTS

All members and those accompanying them are requested to register upon their arrival. The Bureau of Information and Registration will be on the mezzanine floor, Hotel McCurdy.

Members of the House of Delegates are reminded that the first meeting will be on Wednesday, September 25th, at 4:00 p. m. in the Pompeian room of the Hotel McCurdy. Members of the Council will have their first meeting September 25th at 3:00 p. m. on the mezzanine floor of the Hotel McCurdy.

Essayists will please remember that all papers presented before the Association become the property of the Association, and therefore are not to be published or submitted for publication elsewhere than in THE JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

Election of officers will be the first order of business to come before the meeting of the House of Delegates Friday morning, September 27th. No member of the House of Delegates is eligible to office, and delegates to the American Medical Association must have been members in good standing of the A. M. A. for the past two years.

When you register you will be given an official badge. You are requested to wear it, and particularly so when attending or participating in meetings. Members of the House of Delegates will have designating badges. Only accredited delegates are entitled to vote at any meeting of the House of Delegates or even to address the House of Delegates without special permission.

Register early. The booth for registration will be open throughout the session. Please have your pocket cards with you in order to avoid delay in registration. If you have paid your dues to your county secretary *only recently* and have not yet received your membership card, present a receipt from your county secretary and you will be permitted to register. *Please get your badge and wear it.*

Attention of all members is called to the scientific exhibit which is to be held in connection with the general scientific sessions at the Evansville meeting. The exhibit will be on the mezzanine floor of the Hotel McCurdy. There will be a display of fresh pathologic specimens from animals showing relationship of disease in animals to its occurrence in man, from the U. S. Department of Agriculture. The Indiana University School of Medicine will have exhibits from the departments of general surgery, bio-chemistry and pharmacology, bacteriology, surgical pathology, pathology, and from the Riley Hospital for Children. The State Board of Health will be represented by Dr. William F. King, and Dr. Albert E.

Sterne will present an exhibit on neurology and neurodiagnosis.

Make your hotel reservations early. Reservations may be made direct to the hotel or through the executive secretary's office.

Each member should bring his 1929 State Association registration card so that there may be no delay in being registered. Only members who have paid their dues, and their guests, may register and attend meetings.

A reunion and noonday luncheon of Michigan graduates will be held Thursday, September 26th, at Hadi Temple (Shrine) Mosque, to which all former Michigan men and women are most cordially invited. Dr. C. S. Baker, of Evansville, is chairman of the arrangements.

A reduction of one and one-half fare on the "Certificate Plan" will apply for members and dependent members of their families attending the meeting of the Indiana State Medical Association, to be held at the McCurdy Hotel, Evansville, Indiana, Sept. 25-27, 1929, and the arrangements will apply from the following territory:

Points in state of Indiana and from Chicago, Illinois.

The following directions are submitted for your guidance: (1) Tickets at the regular one-way tariff fare for the going journey may be obtained on any of the following dates (but not on any other date): September 21 to 27, inclusive. Be sure that, when purchasing your going ticket, you request a CERTIFICATE. *Do not make the mistake of asking for a "receipt."* (2) Present yourself at the railroad station for ticket and certificate at least thirty minutes before departure of train on which you will begin your journey. (3) *Certificates are not kept at all stations.* If you inquire at your home station you can ascertain whether certificates and through ticket can be obtained to the place of meeting. If not obtainable at your station the agent will inform you at which station they can be obtained. You can, in such case, purchase a local ticket to the station which has certificates in stock, and from there you can buy a through ticket to place of meeting and at the same time ask for and obtain a "Certificate Plan" certificate. (4) Immediately on your arrival at the meeting, present your certificate to the endorsing officer, Thomas A. Hendricks, executive secretary, as the reduced fare for the return journey will not apply unless the certificate is properly endorsed by him and validated by a railroad special agent as provided for by the certificate. (5) Arrangements have been made for validation of certificates by a special agent of the carriers on September 25 to 27, inclusive, provided the required minimum of 150 certificates is presented. (6) *No refund of fare will be made because of failure to obtain a proper certificate when purchasing going ticket.* (7) To prevent disappointment, it should be understood that the reduction on the return journey is not guaranteed, but is contingent on an attendance at the meeting of not less than 150 members of the organization and dependent members of their families, holding regularly issued certificates obtained from ticket agents at starting points, each showing payment of regular one-way adult tariff fare of 67 cents or more on going journey. (8) If the necessary minimum of 150 certificates is presented at the meeting and your certificate is duly validated by the special agent, you will be entitled, up to and including October 1, 1929, to purchase a return ticket via the same route over which you made the going journey, at one-half of the regular one-way tariff fare from the place of meeting to the point at which your certificate was issued. (9) Return ticket issued at the reduced fare will not be good on any limited train on which such reduced fare transportation is not honored.



AMERICAN TRUST AND SAVINGS BANK, EVANSVILLE



MEMORIAL COLISEUM, EVANSVILLE

HOTELS AND ROUTES TO EVANSVILLE

HOTELS AVAILABLE FOR CONVENTION GUESTS

Hotel McCurdy, Vendome Hotel, Hotel Sonntag and New Hotel Lincoln.

a. Rates per day for each hotel:

Hotel McCurdy: \$3.00 single, \$5.00 double; \$3.50 single, \$5.50 double; \$4.00 single, \$6.00 double; \$4.50 single, \$7.00 double; \$5.00 single, \$8.00 double; \$6.00 single, \$10.00 double. Rooms with twin beds \$6.00 and \$10.00 per day double. Club breakfast, 75c; merchants' lunch, 85c; table d'hote dinner, \$1.50. Dining room open from 6 a. m. until 9 p. m. with a la carte service during that time.

Vendome Hotel: Single room without bath, \$1.50 to \$2.00; single room with bath, \$2.00 to \$3.50; double room without bath, \$3.00; double room with bath, \$4.00 to \$5.00. In the coffee shop, club breakfast, 35c to 65c; noonday lunch, 45c; evening dinner, 75c. In the cafe, noonday lunch, 65c; evening dinner, \$1.00; a la carte service also.

Hotel Sonntag: Single room with bath, \$2.00 to \$3.50. Where there are two in a room we add only a very reasonable charge.

New Hotel Lincoln: Single room without bath, \$1.50 to \$1.75; single room with bath, \$2.00; double room without bath, \$2.50 to \$2.75; double room with bath, \$3.50.

b. Rooms with and without baths:

Hotel McCurdy: 300 rooms all with baths and circulating ice water. I. S. M. A. could have about 150 to 175 rooms.

Vendome Hotel: 300 rooms; 260 have baths and forty without. Could take care of at least 250.

Hotel Sonntag: 110 rooms with bath but could probably accommodate only about 75 to 100 people.

New Hotel Lincoln: 40 rooms with bath and 60 without bath but could probably accommodate only about 35 to 40 people.

ROUTES TO EVANSVILLE

a. Railroads:

C. & E. I. from Chicago connects with cross state routes at Danville, Terre Haute and Vincennes. Southern to French Lick and West Baden. Bus routes over all state highways.

b. Highways by automobiles:

Indianapolis to Evansville: Follow U.S. 40 from Indianapolis to Terre Haute, Ind., thence on U.S. 41 to Evansville. Concrete. Distance 196 miles.

South Bend to Evansville: Follow U.S. 31 from South Bend to Indianapolis, thence on U.S. 40 to Terre Haute, and U.S. 41 to Evansville. Concrete. 342 miles.

Fort Wayne to Evansville: Follow U.S. 24 to Huntington, state road 9 to Anderson, state road 67 to Indianapolis, U.S. 40 to Terre Haute, and U.S. 41 to Evansville. Concrete. 328 miles.

Gary to Evansville: From Gary follow state road 55 to the intersection of Federal road 30, (Herrillsville), turn west on 30 to the intersection of U.S. 41 (Scherverville) then south on U.S. 41 to Attica, Terre Haute, and Evansville. All concrete. Distance 319 miles.

French Lick to Evansville: Follow state road 56 from French Lick to Hayesville, then 45 to Jasper, Huntington and Gentryville, to the intersection of road 62, then west on 62 through Boonville to Evansville. Concrete and gravel road. Distance 89 miles.

CONDENSED PROGRAM

(Schedule is made out on Central Standard Time)

Wednesday, September 25, 1929

Morning

- 9 a. m. to 6 p. m., Registration, mezzanine floor, Hotel McCurdy.
- 9 a. m. to 6 p. m., Commercial exhibit, mezzanine floor, Hotel McCurdy.
- 9 a. m. to 6 p. m., Scientific exhibit, mezzanine floor, Hotel McCurdy.
- 9 a. m. to 5 p. m., Annual golf tournament. Eighteen holes, low gross and medal play, Evansville Municipal Course.
- 12 m., Golf luncheon, Club house.

Afternoon

- 12:30 p. m., Luncheon, sightseeing trip and scientific meeting at Evansville State Hospital.
- 3 p. m., Meeting of the Council, mezzanine floor, Hotel McCurdy.
- 4 p. m., Meeting of the House of Delegates, Pompeian room, off of lobby, Hotel McCurdy.

Evening

- 8 to 11:30 p. m., Boat ride on Ohio River, smoker, distribution of golf prizes, music, cards, and other amusement features.

Thursday, September 26, 1929

Morning

- 8 a. m. to 6 p. m., Registration, mezzanine floor, Hotel McCurdy.
- 8 a. m. to 6 p. m., Commercial exhibit, mezzanine floor, Hotel McCurdy.
- 8 a. m. to 6 p. m., Scientific exhibit, mezzanine floor, Hotel McCurdy.
- 8:15 a. m., Breakfast and business meeting, Woman's Auxiliary of the Indiana State Medical Association, Pompeian room, Hotel McCurdy.
- 8:30 to 12 noon, General scientific meeting, ballroom, eighth floor, Hotel McCurdy.

Noon

Various fraternity, military and class luncheons and get-togethers in private dining rooms, Hotel McCurdy.

Afternoon

- 1:30 p. m. to 5:00 p. m., Meeting of Section on Medicine, Auditorium Elks' Home, opposite Hotel McCurdy.
- 2:00 p. m. to 5:00 p. m., Meeting of Section on Surgery, Pompeian room, Hotel McCurdy.
- 2:00 p. m. to 5:00 p. m., Meeting of Section on Ophthalmology and Otolaryngology, Room No. 227, mezzanine floor, Hotel McCurdy.

Evening

- 7:00 p. m., Annual banquet, ballroom, Hotel McCurdy, eighth floor.

Friday, September 27, 1929

Morning

- 7:00 a. m., Breakfast meeting, House of Delegates, Pompeian room, first floor, Hotel McCurdy.
- Meeting of the Council immediately following adjournment of House of Delegates, on mezzanine floor, Hotel McCurdy.
- 8:00 a. m. to 12 m., Registration, mezzanine floor, Hotel McCurdy.

- 8:00 a. m. to 12 m., Commercial exhibit, mezzanine floor, Hotel McCurdy.
- 8:00 a. m. to 12 m., Scientific exhibit, mezzanine floor, Hotel McCurdy.
- 8:30 a. m. to 12 m., Meeting of Section on Medicine, Auditorium Elks' Home, opposite Hotel McCurdy.
- 9:00 to 12 m., Meeting of Section on Ophthalmology and Otolaryngology, Room No. 227, mezzanine floor, Hotel McCurdy.
- 9:00 a. m. to 12 m., Meeting of Section on Surgery, Pompeian room, Hotel McCurdy.

**PROGRAM FOR WOMEN'S ENTERTAINMENT
AND WOMAN'S AUXILIARY OF THE
INDIANA STATE MEDICAL ASSOCIATION**

Thursday, September 26, 8:15 A. M.

(Pompeian Room, first floor, Hotel McCurdy)

- Breakfast and business meeting.
- Call to order and opening address—Mrs. W. R. Davidson, Evansville, president Woman's Auxiliary, Indiana State Medical Association.
- Business session—reports of committees.
- 9:30 a. m., "Mrs. Gullible's Travels in Cosmetic Land," Arthur J. Cramp, M.D., director of the Bureau of Investigation of the American Medical Association.
- 10:30 a. m., Report on Portland session—Mrs. Frank W. Cregor, Indianapolis, first vice-president of the Woman's Auxiliary to the American Medical Association.
- Special table for women physicians in charge of Adeline F. Muelchi, M.D., Evansville.
- Introduction of women physicians of the state.

**OFFICIAL PROGRAM OF THE ANNUAL
SESSION OF THE INDIANA STATE
MEDICAL ASSOCIATION**

**To Be Held at Evansville, Vanderburgh
County, Indiana, Wednesday, Thursday
and Friday, September 25, 26, 27, 1929**

House of Delegates

- First meeting in Pompeian room, Hotel McCurdy, Wednesday, September 25th, at 4:00 p. m.
- Second meeting, Pompeian room, Hotel McCurdy, Friday, September 27th, at 7:00 a. m. (Breakfast meeting).

Council

- First meeting, Room No. 227, mezzanine floor, Hotel McCurdy, Wednesday, September 25th, at 3:00 p. m.
- Second meeting, Friday, September 27th, immediately upon adjournment of House of Delegates, on mezzanine floor, Hotel McCurdy.
- Additional meetings at the call of the chairman of the Council.

General Meetings

- A general meeting will be held in the ballroom on the eighth floor of the Hotel McCurdy on Thursday morning, September 26th.

Section on Surgery

- Thursday afternoon, September 26th, 2:00 p. m., Pompeian room, Hotel McCurdy.
- Friday morning, September 27th, 9:00 a. m., Pompeian room, Hotel McCurdy.

Section on Medicine

- Thursday afternoon, September 26th, 1:30 p. m., Auditorium Elks' Home.
- Friday morning, September 27th, 8:30 a. m., Auditorium Elks' Home.

Section on Ophthalmology and Otolaryngology

- Thursday afternoon, September 26th, 2:00 p. m., Room No. 227, mezzanine floor, Hotel McCurdy.
- Friday morning, September 27th, 9:00 a. m., Room No. 227, mezzanine floor, Hotel McCurdy.

Meeting of Women Physicians

- Special table for women physicians at breakfast meeting of Woman's Auxiliary Thursday, September 26th, 8:15 a. m., Pompeian room, Hotel McCurdy.

Scientific Exhibits

- Wednesday, Thursday and Friday, mezzanine floor, Hotel McCurdy.

Commercial Exhibits

- Wednesday, Thursday and Friday, mezzanine floor, Hotel McCurdy.

Registration

- Wednesday, Thursday and Friday, mezzanine floor, Hotel McCurdy.

Entertainment

- Golf tournament, Evansville Municipal Course, Wednesday morning and afternoon, September 25th, beginning at 9:00 a. m., with luncheon served at the Club house.
- Luncheon for doctors and their wives at Evansville State Hospital as guests of C. E. Laughlin, M.D., medical superintendent, Wednesday, September 25th, at 12:30 p. m.
- Boat ride on Ohio river, Wednesday evening, September 25th, 8:00 to 11:30 p. m. Smoker, distribution of golf prizes, music, cards, and other amusement features.
- Breakfast and business meeting of Woman's Auxiliary, Pompeian room, Hotel McCurdy, Thursday, September 26th, 8:15 a. m.
- Fraternity and class luncheons to be arranged for Thursday noon.
- World war veterans' luncheon, Thursday noon, September 26th.
- Banquet for physicians, wives and guests, ballroom, eighth floor, Hotel McCurdy, Thursday evening, 7:00 p. m.

SCIENTIFIC PROGRAM

GENERAL MEETING

Wednesday, September 25, 1929

- 12:30 p. m., Joint meeting of members of Indiana State Medical Association and Health Officers of Indiana at Evansville State Hospital.
- Luncheon given by C. E. Laughlin, M.D., medical superintendent of the hospital, to which all members of the Association and their wives are invited as guests.
- Principal address: Earl D. Bond, M.D., Administrator and Physician-in-chief of Pennsylvania State Hospital, and president-elect of the American Psychiatric Association.

Subject: "The Treatment of Behavior Problems of Post Encephalitic Disease."

Illustrated lecture of special interest to health officers and of especial value to school physicians as well as the general practitioner.

Thursday, September 26, 1929

- (Ballroom, Eighth Floor, Hotel McCurdy)
- 8:30 a. m., Meeting called to order by President Chas. E. Gillespie, M.D., Seymour.

8:40 a. m., Introduction of Herbert Males, Mayor of Evansville, by H. C. Ruddick, M.D., president of Vanderburgh County Medical Society.

8:45 a. m., Address of Welcome—HERBERT MALES, Mayor of Evansville.

9:00 a. m., President's address—CHAS. E. GILLESPIE, M.D.

9:30 a. m., "Modern Methods of Pre-operative and Post-operative Treatment in Surgical Cases," JOHN SHELTON HORSLEY, M.D., Richmond, Virginia.

Abstract:—Attention is called to the opportunity of a surgeon to improve the outlook on life and the general morale of a patient while his mind is plastic following the strain of an operation. The modern surgeon should not only be anatomically and mechanically minded, but biologically minded. Most improvements in surgery in recent years have come not so much from better development in technical details of an operation, but from improved preoperative and postoperative treatment. The surgery of goiter furnishes an obvious example. All therapeutic remedies are roughly classed under two "r's", rest and resistance. Rest includes not only general rest of the body but physiologic rest of the other organs. Increasing resistance may be relative in diminishing or abolishing the factors that make disease.

The continuous intravenous administration of dextrose in Ringer's solution after many operations is emphasized. The postoperative treatment for prevention of massive collapse of the lung, as recommended by Yandell Henderson, is discussed. Finally, emphasis is placed upon the application of broad biologic principles to preoperative and postoperative treatment, rather than too strict rule of thumb.

10:15 a. m., "The Diagnosis of Allergic Diseases," HAROLD S. HATCH, M.D., Indianapolis.

Abstract:—Definition. Clinically, allergic diseases fall into three groups. Environmental test. Skin reactivity. Cooke's postulates. Skin tests. Diagnosis of pollen sensitivity. Summary.

10:35 a. m., "Medical Frauds," ARTHUR J. CRAMP, M.D., director of the Bureau of Investigation of the American Medical Association.

70:50 a. m., "Arthritis," RALPH PEMBERTON, M.D., Associate Professor of Medicine, Graduate School, University of Pennsylvania. (Lantern slides.)

Abstract:—Age of arthritis as a disease and statistics bearing upon it as an economic burden. Increasing attention given to it in Europe especially. Importance of a wide viewpoint in considering the disease. General etiologic factors. Mechanism of operation of infection. Dynamic changes in the local and general physiology giving rise to the symptoms. Gross morbid anatomy. Leading types of the disease. General principles of treatment based upon the above considerations. Lines into which efforts of treatment must fall. Inadequacy of narrow minded or fixed viewpoints in the treatment of arthritis. Variety of measures necessary to modify existing factors and restore deranged physiology. Importance of coordination of treatment. Responsibility on the profession for permitting development of deformity. Arthritis touches more fields of medicine than any other disease. Wide experience with the clinical symptomatology necessary for successful treatment. Importance of avoiding abuses in handling arthritics. Relatively few cases of arthritis for which nothing can be done. Encouraging prognosis in treatment based upon long series of adequately studied cases. Further research necessary but further extension of existing information regarding arthritis is even more important at present.

10:40 a. m., "The Influence of Accessory Sinus Disease on General Systemic Disturbances," MARCUS RAVDIN, M.D., Evansville.

Abstract:—The accessory sinuses as a focus of infection. The eyes and para-nasal sinuses. Pulmonary and laryngeal tuberculosis and sinusitis. Ulcer of the stom-

ach and accessory sinus infection. The accessory sinuses and the brain.

Annual Banquet

Thursday evening, September 26th, 7 o'clock, Ballroom, eighth floor, Hotel McCurdy.

Toastmaster—Albert E. Bulson, M.D., Fort Wayne. Presentation of certificate of merit to George R. Daniels, M.D., Marion, past president Indiana State Medical Association 1928, by Wm. R. Davidson, M.D., ex-president of the Indiana State Medical Association and ex-chairman of the Council.

Address: "Scientific Medicine," by HAROLD VANORMAN, former lieutenant-governor of Indiana.

Music by "Evansville on the Air" orchestra and soloists.

SECTION ON MEDICINE

Thursday, September 26, 1:30 p. m.

(Auditorium, Elks' Home, opposite Hotel McCurdy)

1. 1:30 p. m. WALTER CLEMENT ALVAREZ, M.D., Mayo Clinic, Rochester, Minn.

Subject: "What Shall We Do for the Patient with Nervous Indigestion?"

Abstract: One must first be sure of the diagnosis. Even when nothing is found to explain the symptoms the cause may be organic disease. Much tact is needed in talking to the patient. The first essential in psychotherapy is a careful and complete examination. Methods of treatment will be described. Ways can be found of giving rest to the fatigued even when they have to continue with work. Diet and useful drugs will be discussed.

2:15 p. m.

Discussants: A. B. Graham, M.D., Indianapolis. Miles F. Porter, Jr., M.D., Fort Wayne.

2. 2:30 p. m. ROBERT M. MOORE, M.D., Indianapolis.

Subject: "Subacute Bacterial Endocarditis—Some Clinical Observations."

Abstract: A brief review of this subject will be given. Factors in the diagnosis will be discussed in conjunction with case reports. Some phases in the differential diagnosis will be considered. Reference to therapy will be made, especially preventive treatment.

3:00 p. m.

Discussants: Edgar F. Kiser, M.D., Indianapolis; George S. Bond, M.D., Indianapolis.

3. 3:15 p. m. EDWARD CLAY MITCHELL, M.D., Professor of Pediatrics, University of Tennessee College of Medicine, Memphis, Tenn.

Subject: "Vomiting Problems in Children." (Lantern slides.)

Abstract: Enumeration of various causes with special reference to surgical and medical diagnosis, pyloric stenosis, treatment of acidosis, importance of fluids in anhydremia. Discussion will be made from lantern slides.

4:00 p. m.

Discussants: Milo K. Miller, M.D., South Bend; John L. Glendening, M.D., Indianapolis.

4. 4:15 p. m. JAMES O. RITCHEY, M.D., Indianapolis. Subject: "Hypertension in Relation to Industrial Employment."

Abstract: Various phases of hypertension are discussed along with secondary effects on blood vessels, heart and kidneys. Consideration of employment from the standpoint of the patient. Considerations of employment from the standpoint of the Company, (a) As to liabilities. (b) As to question of sudden death.

4:45 p. m.

Discussants: Harry W. Garton, M.D., Fort Wayne, physician for General Electric Co.; F. B. Wishard, M.D., Anderson, physician for Delco-Remy Co.

Friday, September 27, 8:30 a. m.

(Auditorium, Elks' Home, opposite Hotel McCurdy)

5. 8:30 a.m. ELLIOTT P. JOSLIN, M.D., Professor Clinical Medicine, Harvard University Medical School, Boston, Mass.

Subject: "The Abolition of Diabetic Coma in the United States."

Abstract: Diabetic coma is an acute disease. Diagnosis of diabetic coma depends largely on a history of its gradual onset. Treatment. Prevention.

9:30 a. m.

Discussants: Chas. P. Emerson, M.D., Indianapolis;

Cecil L. Rudesill, M.D., Indianapolis.

6. 9:45 a.m. FRANCIS EUGENE SENEAR, M.D., Professor of Dermatology, University of Illinois College of Medicine, Chicago, Ill.

Subject: "Cutaneous Tuberculosis and General Medicine."

Abstract: While the types of true tuberculosis of the skin are well known and generally recognized, little attention is paid to a large group of diseases included under the general head of tuberculide. Included in this group are some twenty cutaneous disorders which are found to occur in greater or less frequency in association with tuberculosis.

The majority of these eruptions are directly dependent on a coexisting and underlying visceral tuberculosis and the failure to diagnose them properly often results in the overlooking of a systemic tuberculosis which might be detected through the medium of the cutaneous manifestations.

The tuberculides have many points in common but present a wide variety of clinical pictures in no way resembling the clinical aspects of true tuberculosis of the skin.

Consideration of the more important members of these groups is included together with cases illustrating the importance of these lesions in general medical diagnosis.

10:30 a. m.

Discussants: John H. Gilpin, M.D., Fort Wayne; F. W. Gregor, M.D., Indianapolis.

7. 10:45 a.m. MAX A. BAHR, M.D., Superintendent, Central Indiana Hospital for Insane, Indianapolis.

Subject: "Some Psychiatric Problems in Children."

Abstract: Psychiatric problems in children may be divided into three groups; the first include those who may be called neurotic children; the second those children who present conditions of feeble-mindedness; and third, those who are actually insane.

The examination of children should include the following field of inquiry; physical examination, family history, personal and developmental history, history of school progress; examination in school work, practical knowledge and general information, economic efficiency, social history and traits, moral reactions and mental examination, including the Simon-Benit tests or its modifications.

Defective children are very likely to be misunderstood; are apt to be judged by the standards suitable for the normal child and to be punished for faults and deficiencies which are almost invariable results of their constitutional limitations. During the early period of their lives when much might have been done to develop the formation of good habits of adjustment, they have been subjected to a school regime, which laid all the weight on a type of instruction which they were constitutionally unable to absorb.

The study of the delinquent child leads one invariably from the school to the home, from the narrower pedagogic problems into the wider social problems. To understand the child the influences of the home must be studied.

Adolescence is generally recognized as a critical period in the mental life of the individual, not only is it a period during which disorders are very apt to develop

but it is the time when the mental balance of probably every boy and girl is disturbed to a greater or less degree.

Children should be given opportunity for normal reaction to the natural instincts and impulses; to be active in play and work; to sleep at need, to express their emotions, and not only to have a knowledge of themselves but to observe others and cooperate with them.

11:15 a. m.

Discussants: J. Matthew Pulliam, M.D., Fort Wayne;

L. Potter Harshman, M.D., Fort Wayne.

8. 11:30 a. m.—Election of section officers for 1930.

SECTION ON SURGERY**Thursday, September 26, 2:00 p. m.**

(Pompeian Room, first floor, Hotel McCurdy)

1. 2:00 p. m. JOSEPH H. WEINSTEIN, M.D., Terre Haute.

Subject: "The Value of Fahraeus Reaction in Gynecology."

Abstract: The phenomenon of the separation of blood into two layers by the precipitation of erythrocytes has been known for the past 1700 years and has been studied at different periods, but without practical application until the rediscovery by Fahraeus in 1907 who first applied it for the diagnosis of early pregnancy, and later applied by him and others in gynecology.

There are many theories as to the cause of the phenomenon, but the one most generally accepted is electronic.

It has proved valueless in early pregnancy, but of great value in infection in gynecology.

The sedimentation rate varies according to the virulence of the infection or spread of inflammation. It is of value, therefore, as a prognostic procedure. It is also of value from a diagnostic viewpoint, as it may assist in differentiation, such as, between salpingitis and ectopic pregnancy, and conditions producing irregular uterine bleeding, e.g., fibromyoma and threatened abortion, and is equally useful in other conditions. The average rate in various gynecopathies is fairly constant. Our personal experience coincides closely with the experience of others.

Conclusions: The sedimentation rate is a valuable prognostic and diagnostic aid and reliable index as to the activity and virulence of infection and time safely to operate this type of case.

Discussants: W. N. Rowley, M.D., Kokomo;

Carl Habich, M.D., Indianapolis.

2. 2:40 p. m. H. F. BECKMAN, M.D., Indianapolis.

Subject: "The First Stage of Labor, a Harvest of the Preceding Sins of Omission and the Seeding of the Sins of Commission of the Second Stage."

Abstract: A consideration of the pelvis, the lower uterine segment, and the presenting part, in their relation to the second stage of labor. This will be illustrated by pictures.

Discussants: David A. Bickel, M.D., South Bend; Walter M. Stout, M.D., Newcastle.

3. 3:20 p. m. FRANK H. LAHEY, M.D., Boston, Mass.

Subject: "The Management of Goiter."

Abstract:—In the management of goitre, the various types of thyroid disease will be presented, together with the important features of diagnosis and indications for surgical treatment, the prevention and treatment of thyroid crises, the end results in thyro-cardiacs and the relation of adenomata to malignancy will be emphasized. Lantern demonstration.

Discussants: Miles Porter, Sr., M. D., Fort Wayne; W. D. Gatch, M.D., Indianapolis.

4. 4:20 p. m. ELI SHERMAN JONES, M.D., Hammond. Subject: "Treatment of Scirrhus Lesions of the Stomach and Duodenum."

Abstract: Treatment of scirrhus and obstructive

lesions of the stomach and duodenum. Medical treatment has not been effective in many cases. Gastroenterostomy has too many unfavorable sequelae. Pyloroplasty is applicable to too small a percentage of cases. Partial gastric resection is the most satisfactory means of treating successfully the above conditions. Emphasizing a few points of technique, post-operative management, with case reports.

Discussants: Jacob K. Berman, M.D., Indianapolis;
B. L. Harrison, M.D., Newcastle.

5:00 p. m. Election of section officers for 1930.

Friday, September 27, 9:00 a. m.

(Pompeian Room, first floor, Hotel McCurdy)

5. 9:00 a. m. SUMNER L. KOCH, M.D., Assistant Professor of Surgery, Northwestern University School of Medicine, Chicago.

Subject: "Treatment of Acquired Contractures of the Hand."

Abstract:—These contractures may be divided into groups: (1) Those in which the contracture is due essentially to a loss of covering tissue, usually the result of crushing injuries or burns; (2) those in which the subcutaneous tissues are primarily involved, as in Dupuytren's contraction; (3) those in which the involvement of the tendons is the essential factor; (4) those in which nerve involvement is the essential factor; (5) those in which the periarticular structures or the bones themselves are seriously involved; (6) those complicated cases in which each of the structures mentioned are involved to a greater or lesser degree. In each group particular attention must be paid to the primary cause, and a number of definite surgical procedures may be utilized to bring about improvement of function.

Discussants: Ray G. Ikins, M.D., Lafayette;
Geo. A. Collett, M.D., Crawfordsville.

6. 10:00 a. m. LEON ZERFAS, M.D., Indianapolis.
Subject: "Some Observations on the Use of Sodium Iso-amylethyl Barbiturate."

Abstract: Many of the difficulties encountered with the use of barbituric acid derivatives have arisen from the instability and lack of uniformity of the preparations employed.

The difference between pH 9.2-9.3 and pH 9.5-9.8 is enough to cause unsatisfactory anesthetic results and even marked respiratory difficulties in animals.

The dosage has been found to vary somewhat with the individual patient and according to the effects desired. For use in controlling the convulsions of tetanus, strychnine poisoning, rabies, eclampsia, etc., it is seldom necessary to give more than 0.5-0.8 grams intravenously. This solution should be given slowly—at the rate of about one cubic centimeter per minute.

When used as an adjunct to general or local anesthetics, 1.0 to 1.5 grams may be given prior to the administration of nitrous oxide, ethylene, ether, etc.

When given prior to ether, the excitement stage is eliminated as is the postoperative nausea and vomiting. It is a safeguard when given preceding the use of procaine or cocaine, and, at the same time, it eliminates the apprehension and mental anguish of the patient.

We believe that this drug, when used in the amounts recommended and to accomplish a definite result, will be a useful therapeutic agent in medicine and an adjunct to anesthesia.

Discussants: Goethe Link, M.D., Indianapolis;
Frank S. Crockett, M.D., Lafayette.

7. 10:40 a. m. JOHN T. SHORT, M.D., Fort Wayne.
Subject: "Carcinoma of the Bladder."

Abstract: Many bladder tumors are resistant to endovesical attack and open operation, and have occasioned a diversity of treatments and results. This malignant group is considered here.

Carcinoma of the Bladder, causing—deaths in Indiana last year (figure will be available), is rarely seen in people under thirty. Etiology by stones and infection is ruled out by absence in early cases.

Tumors invading the bladder cavity are benign and malignant papillomata and papillary carcinomata. Carcinomatous ulcers and intramural forms occur. Other forms are comparatively rare. Recurrences are common and may differ from the original. Metastasis is late, and death is more often caused by renal impairment through obstruction and infection.

Symptoms may be delayed.

Cystoscopy is most important in diagnosis of early stages and recurrences, and usually differentiates benign growths. Microscopy of a specimen may furnish prognostic data.

Treatment must be suited to the individual case.

Early recognition is simple if suspects are examined. This subject is presented with the hope of stimulating interest in the early diagnosis, treatment and subsequent supervision of this most distressing condition.

Discussants: Clarence L. Bock, M.D., Muncie;
R. R. Acre, M.D., Evansville.

8. 11:20 a. m. JAMES Y. WELBORN, M.D., Evansville.

Subject: "Blood Vessel Surgery,—Report of Two Cases."

Abstract:—Not received.

Discussants: F. H. Jett, M.D., Terre Haute;
H. O. Bruggeman, M.D., Fort Wayne.

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Thursday, September 26, 2:00 P. M.

(Room No. 227, Mezzanine Floor, Hotel McCurdy)

1. 2:00 P. M.—Call to order by H. C. Knapp, M.D., Huntingburg, Chairman of the Section.
Chairman's Address.

2. 2:15 P. M.—MEYER WIENER, M.D., Associate Professor, Clinical Ophthalmology, Washington University School of Medicine, St. Louis, Mo.

Subject: "Some Points on Cosmetic Surgery of the Eye." Blackboard demonstration and lantern slides.

Abstract:—Points in technique on various methods for correcting cosmetic defects of the eye. Variations in technique and improvements devised by the author for correction of ptosis, ectropion, entropion. Various forms of squint both regular and paralytic, etc. Indications and contra-indications for these operations.

Discussants: L. D. Brose, M.D., Evansville;

John R. Newcomb, M.D., Indianapolis.

3. 3:15 P. M.—HUGH A. KUHN, M.D., Hammond.
Subject: "Treatment of Glaucoma."

Abstract:—In persons past forty years of age a large percentage of blindness is caused by glaucoma. Much progress has been made in the prevention of blindness in industrial eye injuries, ophthalmia neonatorum, brain tumor, optic atrophy, etc., but none of the groups of persons concerned with conservation of vision have given publicity to the ravages of glaucoma, its frequency and sureness of causing blindness. Importance of eye examination by competent oculists needs no stressing here. We know that uncharacteristic symptoms of glaucoma make its diagnosis in the early stages when it is most manageable a very difficult one. Primary glaucoma: a, simple; b, inflammatory; c, malignant. General discussions of the pathological diagnosis and treatment.

Secondary glaucoma: a general discussion of differential diagnosis and treatment. The comparative values of various lines of therapy in each type of glaucoma.

Discussants: Charles E. Savery, M.D., South Bend;
Lyman Overshiner, M.D., Columbus.

4. 4:15 to 5:00 P. M.—Eye Case Reports by—
E. M. SHANKLIN, M.D., Hammond.

Case of Sympathetic Ophthalmia. Boy of 14; duration, ten days; 12 years after injury to exciting eye.

JOHN R. GILLUM, M.D., Terre Haute.

Case of Pulsating Exophthalmos, symptoms of which became increased following ligation of the common carotid.

C. P. CLARK, M.D., Indianapolis.

Oxycephaly and Medullated Nerve Fibers of the Optic Disc. Photographs with x-ray views of skull, and charts of the visual field to be shown with lantern.

O. G. BRUBAKER, M.D., North Manchester.

Case report: Acute iridocyclitis; posterior synechia.

Friday, September 27, 9:00 A. M.

(Room 227, Mezzanine Floor, Hotel McCurdy)

5. 9:00 A. M.—J. A. STUCKY, M.D., Lexington, Ky.
(Guest of the Section).

Subject: "Some Unsolved Problems in Ophthalmology and Otolaryngology."

Abstract:—1. Reasons for presentation of this topic.
2. The clinical study of eye, ear, nose and throat diseases in secluded mountain sections of Eastern Kentucky. 3. Treatment and end-results for the past fifteen years.

6. 10:00 A. M.—D. O. KEARBY, M.D., Indianapolis.

Subject: "A Study of 100 Cases of Suppurative Maxillary Sinusitis—Symptomatology, Diagnosis and Treatment."

Abstract:—The maxillary antra, owing to position in the skull, relationship to nose, other sinuses and teeth, are the most easily infected and least likely to recover spontaneously. Simplicity of symptoms that should lead one to investigate the antra for infection. Comparison of symptoms of acute and chronic cases. Diagnosis of each and our usual routine of treatment.

Discussants: W. O. McBride, M.D., Fort Wayne;
Herman L. Stanton, Evansville.

7. 10:40 to 11:40 A. M.—Ear, Nose and Throat Case Reports by—

J. W. CARMACK, M.D., Indianapolis.

Sinusitis, chronic polypoid, atrophic type. Multiplicity of co-existing diseases. Emphasis on diagnosis.

ALBERT E. BULSON, M.D., Fort Wayne.

Cerebrospinal Rhinorrhea of Traumatic Origin.

E. L. LINGEMAN, M.D., Indianapolis.

Osteoma of the Frontal Sinus.

11:40 A. M.—Election of section officers for 1930.

SCIENTIFIC EXHIBIT

(Rooms 201, 224, 225 and 226, Mezzanine Floor, Hotel McCurdy)

- I U. S. Department of Agriculture (Room 225).
Display of fresh pathologic specimens from animals showing relationship of disease in animals to its occurrence in man.
- G. W. Butler, V.D., Chief of Department of Meat Inspection for Indiana District.
- II Indiana University School of Medicine.
- (1) Department of General Surgery—Wendell D. Little, M.D. (Room 226).
 - (2) Department of Bio-Chemistry and Pharmacology—R. N. Harger, Ph.D. (Room 224).
 - (3) Department of Bacteriology—Thurman B. Rice, M.D. (Room 201).
 - (4) Department of Surgical Pathology—Frank Ramsey, M.D. (Room 224).
 - (5) Department of Pathology—Frank Forry, M.D. (Room 201).
 - (6) Riley Hospital for Children—G. J. Garceau, M.D. (Room 201).
- III State Board of Health (Room 225).
William F. King, M.D., Health Commissioner of Indiana
- IV Neurology and Neuro-Diagnosis—Albert E. Sterne, M.D. (Room 226).

COMMITTEES ON ARRANGEMENTS FOR EVANSVILLE SESSION

General Arrangements Committee: G. C. Johnson, chairman; J. C. McClurkin, Keith T. Meyer, Bernard D. Ravdin, H. C. Ruddick, James Y. Welborn, Chas. C. Sutter, Pierce McKenzie, W. R. Davidson, J. H. Hare, C. E. Laughlin, A. M. Hayden, D. G. Tweedall, Wm. E. Barnes.

Golf Committee: Robert R. Acre, chairman; Warren W. Hewins, J. N. Jerome, Paul V. Lynch, Walter S. Pollard, Isadore J. Raphael, Thomas F. Reitz, O. C. Stephens, L. D. Brose, A. F. Clements.

Registration Committee: Alvin E. Newman, chairman; Herman M. Baker, J. F. Wynn, Robert W. Viehe, H. G. Weiss.

Military Service, Class and Fraternity Committees: Clarence S. Baker, chairman; A. E. Allenbaugh, R. M. Walden.

Publicity Committee: Wallace C. Dyer, chairman; Alvin E. Newman, Harmon L. Stanton, G. B. Underwood, W. R. Cleveland, Wm. S. Ehrich, Louis E. Fritsch, I. C. Barclay.

Finance Committee: Pierce McKenzie, chairman; James Y. Welborn, Marcus Ravdin, John H. Hare, A. M. Hayden, W. R. Hurst, Wm. E. Barnes, Earl Conover, P. B. Combs, Wm. C. Caldwell, W. R. Davidson, Wm. Field, W. P. Woods.

Hotel Committee: Bruce H. Beeler, chairman; C. A. Hartley, H. M. Kauffman, D. G. Tweedall, E. L. Boyd.

Automobile Committee: Minor Miller, chairman; Victor I. Varner, C. C. Herzer.

Reception Committee: W. F. Clippinger, chairman; J. Perry Wolfe, R. M. Walden, Phil. Warter, H. G. Weiss, C. W. Yeck, A. E. Allenbaugh, Clarence S. Baker, J. S. Baker, W. H. Coleman, D. B. Cain, Hardin S. Dome, G. C. Dunlevy, C. F. Diefendorf, Sidney J. Eichel, W. G. French, E. F. Magenheimer, W. E. McCool, Henry Nenneker, George M. Royster, Lee H. Tully, E. C. Taylor, Robert W. Viehe, Victor I. Varner, John W. Visser, Shelby W. Wishart, J. F. Wynn, Joseph H. Willis, Chas. J. Folz, H. M. Garrison, C. C. Herzer, Leopold Heiman, Chas. W. Hartloff, Blecker J. Knapp, Shirley C. Lang, John W. Lorenz, Edw. B. Long, Wm. J. Laval, D. V. McClary, Adeline F. Muelchi, Minor Miller.

Committee on Women's Entertainment: Mrs. H. C. Ruddick, general chairman; Mrs. Robert Viehe, special chairman

Committee on Entertainment of Women Physicians: Adeline F. Muelchi, M.D., chairman; Stella Boyd, M.D., Minerva Blair Pontius, M.D.

Committee on Lanterns: Keith T. Meyer, M.D., chairman.

REPORT OF COMMITTEE ON CREDENTIALS

House of Delegates, Indiana State Medical Association:
Gentlemen:—We, your committee, recommend that every duly elected delegate come to Evansville, in September, with the properly signed credentials in order to facilitate matters in the seating of regular delegates, as no member will be seated in the absence of the proper credentials.

Committee,

G. D. MILLER, M.D., Logansport, Chairman.
CHARLES STOLTZ, M.D., South Bend.
HARRY M. PELL, M.D., Brazil.

REPORT OF EXECUTIVE SECRETARY

House of Delegates, Indiana State Medical Association:
Gentlemen:—The 1929 reports detailing the numerous activities of the various standing committees, councilors and officers of the state association are so complete that your secretary is at a loss to find much to add in his review except an expression of appreciation. In a measure this is as it should be, for it shows that the committees, councilors and officers have truly functioned during the year.

Indeed, so thorough has been their work that at the time this is being written, not one piece of correspondence nor a single matter of business is at headquarters office waiting to come to the attention of the House of Delegates that has not been placed first before some committee for consideration.

We want this report to be just as short and concise as possible but we would like to make the following general remarks:

1. We at headquarters office desire to thank the members of the state association for their fine support, helpfulness and many practical suggestions that have meant so much to us for the several past years.

2. This office desires to give increasing service to the individual physician. Sometimes we can help, sometimes we cannot do a thing, but at least we can try.

3. Your committees, as you may see from their reports, are functioning. These are not "paper" committees, but they are real, active, working bodies always ready to undertake any duty that may be in their province in the interest of the public and the profession.

4. This is your office and those in charge are on the job every day in the year for you.

5. In conclusion, figures show that the individual physicians of the state are regarding membership in the state association as a necessity more and more every day. The American Medical Association directory for 1927 gave the total number of physicians in Indiana as 4,164 with a total membership in the Indiana State Medical Association as 2,632. The 1929 directory gave the total number of physicians in Indiana as 4,102, a loss of sixty-two physicians to the state in two years. The membership in the state association in 1929 was 2,690 or a gain of fifty-eight.

Thus, despite the fact that there are sixty-two less physicians in Indiana today than two years ago, fifty-eight more physicians belong to the state association than belonged two years ago. This, we believe, is the mark of an active, growing, efficient organization.

REPORT OF PETTY CASH FUND

August 1, 1928, to August 1, 1929.

RECEIPTS	
Balance August 1, 1928.....	\$ 200.00
Checks received from treasurer.....	1,436.66
Total receipts	\$1,636.66
EXPENDITURES	
Executive Committee	\$ 631.14
Publicity Committee	245.98
Legislative Committee	517.61
Committee on Scientific Work.....	.92
Annual Session	22.20
Secretaries' Conference	11.66
Treasurer	2.50
Miscellaneous Committees	4.65
Total expenses	1,436.66
Balance	\$ 200.00

Respectfully submitted,
THOMAS A. HENDRICKS,
Executive Secretary.

REPORT OF TREASURER

House of Delegates, Indiana State Medical Association:
Gentlemen:—The following statement from the auditor of the Association accounts and a comparative statement of the application of funds for the period from January 1 to August 1 for the years of 1928 and 1929 constitute the report of the treasury for this year.
August 1, 1929.

Wm. A. Doeppers, M.D.:
The attached statement shows the application of funds for the period of January 1, 1929, to August 1, 1929, as reflected by the books at that date.
R. E. WELCH.

Comparative statement of application of funds for the period of January 1 to August 1 for the years of 1928 and 1929.

INCOME		Increase or Decrease*	
	1928	1929	
Membership Dues	\$18,767.00	\$18,830.00	\$ 63.00
Interest on Liberty Bonds.....	106.25	106.25	
Interest on Certificates of Deposit and Checking Accounts	1,273.76	968.72	(305.04)
Unexpended Balance of Contingent Fund	300.00		(300.00)
Total Receipts	\$20,447.01	\$19,904.97	(\$ 542.04)
EXPENDITURES			
Executive Secretary's Office.....	\$ 6,271.37	\$ 5,995.77	(\$ 275.60)
Publicity Committee	308.18	270.97	(37.21)
Public Policy	120.59	383.71	263.12
Journal	5,338.00	5,386.00	48.00
Council	227.20	177.63	(49.57)
Treasurer	217.50	436.50	219.00
Annual Session	7.62	86.40	78.78
Miscellaneous Committees	152.50	151.57	(.93)
Attorneys Fees	175.00	175.00	
Medical Defense Fund	1,650.00	498.97	(1,151.03)
Better Business Bureau	200.00		(200.00)
Total Expenditures	\$14,667.96	\$13,562.52	(\$1,105.44)
Net Income to August	\$ 5,779.05	\$ 6,342.45	\$ 563.40
Checking Account Balance at January 1st.....	4,315.26	981.94	(3,333.32)
Less Amount Transferred to Certificate of Deposit and Real Estate Bonds.....	(5,000.00)	(5,000.00)	
Checking Account Balance at August 1st	\$ 5,094.31	\$ 2,324.39	(\$2,769.92)

STATEMENT OF SURPLUS AT AUGUST 1st

	1928	1929	Increase or Decrease
Surplus at January 1st	\$27,015.26	\$26,181.94	(\$ 833.32)
Adjustment of Contingent Fund	(2,500.00)		2,500.00
Net Income to August 1st	5,779.05	6,342.45	563.40
Surplus at August 1st.....	\$30,294.31	\$32,524.39	\$2,230.08
ANALYSIS OF SURPLUS ACCOUNT			
Certificates of Deposit with Meyer-Kiser Bank	\$20,000.00	\$20,000.00	\$
Liberty Bonds	5,000.00	5,000.00	
Real Estate Bonds		5,000.00	5,000.00
Checking Account Balance at Bankers Trust Co.	200.00	200.00	
Checking Account Balance at Meyer-Kiser Banks	5,094.31	2,324.39	(2,769.92)
	\$30,294.31	\$32,524.39	\$2,230.08
Membership paid at July 31st	2,681	2,690	9

Respectfully submitted,
WILLIAM A. DOEPPERS,
Treasurer.

*Parenthesis () denotes decrease.

REPORT OF THE CHAIRMAN OF THE COUNCIL

House of Delegates, Indiana State Medical Association:

Gentlemen:—As the October, 1928, and the January, 1929, numbers of THE JOURNAL give in detail the minutes of the Council, the chairman of that body wishes here to give only a short outline of the principal acts of the Council during the past year.

FIRST MEETING, GARY, INDIANA, SEPTEMBER 26, 1928.

The Council convened at the Hotel Gary at noon. The roll call showed eleven of the thirteen councilors present, along with the president, the president-elect, and the editor of THE JOURNAL. As each councilor had made a formal report upon the condition of his own district in the annual convention number of THE JOURNAL and as there were no additions or corrections to these reports they stood as originally printed. Without exception they showed an active and healthy condition in each district of the state.

The report upon the technical exhibits showed there were twenty-six exhibitors, and in addition the American Medical Association had a Hygeia exhibit.

A scientific exhibit added to the interest of the 1928 meeting.

The Council expressed hearty approval of the attitude of the editor of *THE JOURNAL* in his stand on advertising that was ethical and in good taste.

White county, which had been part of the Tenth District, was placed in the Ninth District by the Council. This change was thought best due to the lack of natural geographic connections which White county had with the other counties in the Tenth District.

The Council went on record favoring a joint meeting between the State Board of Health and the Council at the regular mid-winter meeting of the Council. (This conference was held at the mid-winter meeting of the Council at Indianapolis, December 20, 1928.)

A contact committee was appointed to cooperate with the proper government officials in any activity of legitimate concern to the medical profession.

SECOND MEETING, GARY, INDIANA, SEPTEMBER 28, 1928.

Nine councilors of the thirteen districts were present, along with the president and the president-elect of the State Association. As Dr. William R. Davidson resigned as chairman of the Council, Dr. E. E. Evans, councilor for the Tenth District was elected temporary chairman to serve until the regular mid-winter meeting.

Resolution passed expressing thanks to Doctor Davidson, retiring chairman of the Council, for his splendid work and activity in behalf of scientific medical organization while a member and chairman of the Council.

MID-WINTER MEETING OF THE COUNCIL, INDIANAPOLIS, DECEMBER 20, 1928.

Eight members of the Council were present, along with the retiring president, the president-elect for 1929, the president-elect for 1930, the treasurer, and the editor of *THE JOURNAL*. The Council faced an unusually heavy program, the business session starting at 10:30 in the morning and the adjournment coming late in the afternoon.

The reports of the councilors of the districts showed every district in good condition.

The councilor for the Eighth District objected to certain literature that is being printed in behalf of the Riley Hospital and used as "propaganda" in various counties in his district. The councilor expressed his belief that much work is being sent to the Riley Hospital in Indianapolis that could just as well be done in the various local communities. The Council went on record that nurses who are visiting the various counties in regard to Riley Hospital work get in touch with county medical societies in every county in which a campaign for the Riley Hospital is being carried on.

Reports of officers and the editor of *THE JOURNAL* received, the editor stating that he desired a greater number of personal items, news notes and comments upon individual physicians. The president-elect for 1930 suggested that short, practical articles that would be of help in everyday practice would be a valuable asset to *THE JOURNAL*. He spoke of the fact that almost every physician had certain methods in his work which would be valuable information to the profession as a whole.

Preliminary report upon the annual session at Evansville in 1929 received by the Council.

Reports from chairmen of the various standing committees received.

Members and the secretary of the State Board of Health attended the noon luncheon as guests of the Indiana State Medical Association.

The following counties were listed as having no medical organization:

Marshall County. (Due to local circumstances it is thought best not to have a Marshall County Medical Society as most of the physicians in that county belong to and attend meetings in adjoining county medical societies.)

Starke County.

Brown County.

Dr. David Ross and Dr. William H. Kennedy were unanimously elected as members of the Executive Committee for 1929.

Dr. E. E. Evans, of Gary, temporary chairman of the Council, was elected permanent chairman of the Council for 1929.

NEW COUNCIL BUSINESS

Each councilor is asked to pay particular attention to the 1929 report of the Executive Committee which appears in the committee reports for the present year. Certain questions are brought up in this report concerning the method of handling information regarding tuberculosis cases by the State Board of Health and also concerning the functioning of public health nurses in the various counties. The questions are of importance and the chairman of the Council desires each councilor to be familiar with them so the matter can be discussed at a meeting of the Council during the Evansville session.

The chairman of the Council wishes to thank each member of this group for his cooperation and help during the past year.

Respectfully submitted,

E. E. EVANS,

Chairman of the Council.

REPORTS FROM COUNCILOR DISTRICTS

First Councilor District

The seven counties of the First District are well organized with an excellent group of officers in each county. The district society is quite inactive but maintains an organization. There are few eligible physicians in any of the counties who are not members of their county society, and those are because of negligence. Professional feeling throughout the district is excellent.

The small societies of from ten to twenty members in Posey, Warrick, Spencer, Perry, Gibson and Pike Counties meet irregularly, but all have met at least three or four times during the year. Vanderburgh County enjoys from four to eight medical meetings each month and the members of the smaller county societies feel that they receive program enough by attending meetings in Evansville at their convenience and pleasure.

The Vanderburgh County Society is the only large society in the district. There are ninety-seven members and meetings are held at regular intervals with fair attendance. Programs consist of essays by the members, clinical demonstrations at the various hospitals and papers by invited guests from other cities.

JOHN H. HARE, Councilor.

Second Councilor District

This year conditions in the Second District were very good, with practically all physicians that were eligible being members of their county society.

During the last year, I have attended meetings of Owen, Greene, Knox, Daviess-Martin, and Sullivan counties. All of these meetings were well attended, and the programs were good.

The Second District Society met at Eagle Island in the Wabash River, Sullivan County, August 27, 1929. This meeting was the first to be held in the Second District for several years, and the attendance was good, and the spirit as of old.

G. D. SCOTT, Councilor.

Third Councilor District

Nothing unusual to report in the district. Things go on in the usual way. We have had two excellent district meetings in the last year, one at Orleans and the other at Bedford, with excellent papers and discussions.

The county meetings have not been all that could be desired, for reasons heretofore stated in the district reports.

We hope to have a good district meeting in Orange County this fall.

W. J. LEACH, Councilor.

Fourth Councilor District

The Fourth District seems to be in a very healthy condition. Each county society is maintaining its organization in a satisfactory manner, but I think each one could do a little better in regard to scientific papers and discussions at its regular meetings, especially papers by its own members.

The annual meeting was held in Greensburg on May 21st. The following papers were presented: "Acute Appendicitis," Dr. Geo. E. Denny, Madison; "Obstetrics," Dr. T. M. Mueller, Lawrenceburg; "Anaesthetics," Dr. C. W. Wood, Columbus; "The After Care of Fractures," Dr. W. H. Stemm, North Vernon. The president of the District Society gave a splendid address on the "Care of Infants." Dr. C. E. Gillespie was unable to be at the meeting to give his talk on "Acute Nasal Sinus Diseases." As the only "out-of-town" speaker Dr. Robert Moore, of Indianapolis, talked on "Some Clinical Factors in the Diagnosis of Coronary Occlusion." His talk was in the nature of a suggestion that the doctor needed a lot of the advice he gives the patient, and he was taking that opportunity to give a free consultation to the members present. An excellent dinner and program closed the day.

H. P. GRAESSLE, Councilor.

Fifth Councilor District

The fifth District is in a state of "normalcy."

The condition of Parke-Vermilion is still a puzzle as to the best method of handling. For various reasons, principally geographical and road, it has been for many years impossible to keep an active aggressive society going.

The close proximity of Terre Haute and the many activities of the Vigo County Society draw the doctors from all of the surrounding counties, especially from the north. Most of the Parke-Vermilion doctors express their preference of joining Vigo County instead of their own county society. This makes it difficult to maintain an active society there.

Clay and Putnam Counties are both in a healthy, satisfactory condition.

The County Hospital recently built at Greencastle was an impetus to organization in Putnam County.

The new and complete hospital just occupied at Brazil has put new life into Clay County. The district meeting held at Brazil with open house at the hospital, a sumptuous banquet and an address upon an intensely live and vital subject, most ably and "vehemently" presented by the militant editor of our STATE JOURNAL, Doctor Bulson, was well attended. Our affable efficient secretary, "Tommie", Councilor Scott from the Second District and other representatives from the Second and Third Districts were present. Dr. M. R. Combs was elected president and Dr. F. E. Sayers, secretary.

J. H. WEINSTEIN, Councilor.

Sixth Councilor District

On June 6 in Shelbyville the societies of the district met with an attendance of sixty percent and every member has expressed that it was a well spent day. Wayne County had no representation.

The societies of the district, except Shelby, have had regular and well attended meetings.

Early this fall a meeting is contemplated for a review of the cold weather maladies.

BAYARD G. KEENEY, Councilor.

Seventh Councilor District

Marion, Hendricks, Morgan and Johnson Counties. In general conditions in this district are satisfactory.

Marion County—

Total membership in good standing—467.

Delinquent—11.

New members for year—28.

Lost by death—3.

Honorary members—8.

Meetings weekly on Tuesday evening, October 1 to July 1.

About fifty percent of programs are furnished by visiting speakers.

Average attendance—100.

The Medical Directory lists for Marion County, 787 doctors, there are therefore 320 doctors not listed as members. This is much larger than it should be.

Morgan County—

Active membership—23.

Delinquencies—3.

Meetings are held twice a month.

Hendricks County—

Active members—17.

Delinquencies—0.

Meetings are held only once in three months, but these meetings are well attended.

Johnson County—

Members in good standing—13.

Delinquencies—5.

Meetings are held in the fall and officers are elected. No other regular meetings. Members often attend meetings in adjoining counties.

Annual District Meeting was held October 29, in Martinsville. This meeting was well attended and an interesting program was presented. The members of the profession in Morgan County are to be congratulated on their efforts and entertainment at the District Meeting.

With the help of the Better Business Bureau and the State Board of Registration and Examination, this district has been relieved of one so-called Cancer Hospital in the past year.

E. E. PADGETT, Councilor.

Eighth Councilor District

The Eighth District of the Indiana State Medical Society has had an active year and all the component-county societies have held regular and well attended meetings. Randolph County makes up a yearly advance program and has an out of town speaker every other month and local talent alternating. This is the best of all plans if local talent can be persuaded to furnish suitable papers or clinics. Jay County also follows this same plan and has in addition a meeting every month in the year. The Delaware-Blackford County secretary made no report but is the local outlet for men in both counties while the Muncie Academy furnishes the profession with addresses twice a month by the outstanding men from all over the country. The Madison County Medical Society holds nine meetings a year and finds its greatest fault in getting local talent to give the society its support in the way of furnishing papers as they should. It is supplemented however by the staff meetings of St. Johns Hospital in Anderson once a month with active clinical reports and discussions, and a local society in Elwood doing the same work in connection with Mercy Hospital in that city. Many physicians over the district are regular in their attendance of not only their local society meetings but are grateful for the opportunity of hearing the men that the Muncie Academy is bringing to stimulate our efforts and improve our knowledge.

M. A. AUSTIN, Councilor.

Ninth Councilor District

The year closes with the Ninth District organization in good condition. We have within the membership nearly all of those eligible. County organizations are good with one exception where three alleged factions have so far failed to work in harmony. An extraordinary effort was made last year to bring peace and concord but without visible results. It is hoped that the mellowing influence of time will destroy this tradition of discord.

The Annual Meeting at Crawfordsville was a marked success. A golf tournament held during the morning hours at the Country Club, a noon luncheon meeting of the House of Delegates to which the County Society

presidents and secretaries were invited, a scientific session in the afternoon made up of talent within the district, and an evening dinner with an out-of-district speaker following, made the day's events one of continual interest and entertainment.

Most of the credit for the prosperous state of affairs in the district is due to the loyal and hearty cooperation of the county officers and membership generally, so that the duties of Councilor have been very pleasant and interesting.

F. S. CROCKETT, Councilor.

Tenth Councilor District

According to Chapter VII, Section 2 of the By-Laws, I herewith present a report of conditions in the Tenth District:

Since the last report the society has held two meetings, one at George Ade's beautiful estate as guests of the Jasper-Newton Society, and one at Gary. Both meetings were well attended, and the programs were good.

In the Lake County Medical Society the attendance has shown an increase over the preceding year, and the interest in meetings has been greater than formerly.

An innovation this year has been of more than common interest—that of having each of the four major hospital staffs put on a program; thus far two such programs have been held, and each has been very well received.

Membership will show no material change over 1928, the banner year of the society. The increase in 1928 was materially affected by having the State Association meeting. Fewer new men have come into the county this year than usual.

For some time past meetings have been assigned to various hospitals in the county and the same plan has been adhered to this year.

Less than half a dozen eligibles are without the fold, as regards membership.

The Jasper-Newton Society has had a very good year. The attendance has been good, and the number of members remains about the same. The society is taking the course offered by the Indiana University School of Medicine, which sends out the speakers and arranges the course. The addresses have been fine, and the majority of the members are satisfied.

The Porter County Society has held its own, in members, meetings, and interest.

During the year each component county society has made progress, and has maintained its good standing.

At the meeting at Gary, Dr. E. E. Evans presented his resignation as Councilor to take effect September 25, and Dr. E. M. Shanklin, of Hammond, was unanimously elected for the remainder of the term.

E. E. EVANS, Councilor.

Eleventh Councilor District

As councilor of the Eleventh Councilor District of Indiana I wish to make the following report:

Conditions in the Eleventh district are in fine shape. Two district meetings were held at which an average of eighty-seven members were present. Good programs were carried out, a clinic in the forenoon and a paper by a visitor in the afternoon, with a banquet in the evening.

The district has a paid-up membership of 213, with a balance of over \$500 in the treasury. All counties have at least nine meetings each year. Our motto, "None Better in the State," has been realized.

IRA E. PERREY, Councilor.

Twelfth Councilor District

August 30, 1929.

The societies of the Twelfth district have enjoyed a successful year and are in a satisfactory condition. The respective societies report as follows:

Adams County—Has met every second and fourth Friday. All meetings fairly well attended. Every eligible physician in the county is a member of the society.

Allen County—Has met every Tuesday evening except

July and August. Fair attendance. There are a few physicians who might be considered desirable who for various reasons are not members of the organization.

DeKalb County—This society is united with those of Steuben, Lagrange and Noble Counties to form the Northeastern Indiana Academy of Medicine, which body holds regular meetings. DeKalb County has twenty-one paid-up members for 1929. There are probably seven men in the county who are not members and unsuccessful attempts have been made to get these men into the society.

Lagrange County—The society meets regularly with the Northeastern Indiana Academy of Medicine and holds one annual meeting. Every physician in the county belongs to the society.

Noble County.

Steuben County—This society also meets with the Northeastern Indiana Academy of Medicine. The county society meets every three months for the transaction of business and for case reports. There are two physicians in the county who should be members of the society.

Wells County—The county has had but three regular meetings during 1929. Every eligible physician in the county is a member of the society.

Whitley County—Regular meetings the second Thursday of every month. There are two eligible physicians in the county who are not members of the society—one of these cannot be induced to join and the other one is not desired by the majority of the members.

I think it would be wise for the state society to encourage some of the smaller county societies to hold joint scientific sessions after the manner of the Northeastern Indiana Academy of Medicine.

H. O. BRUGGEMAN, Councilor.

Thirteenth Councilor District

Conditions in the Thirteenth District were never better than now. The last annual meeting of the district was well attended and an excellent program was presented and well discussed. The various county societies are doing a high class of scientific work and the hospital clinics, which are well attended, are proving beneficial as a spur to better diagnosis and treatment of disease. Outside talent, notably from Chicago and Indianapolis, and frequently from other large medical centers, has been freely requisitioned for the discussion of outstanding medical problems. These have proven very helpful and have called out remarkably good attendance at the meetings.

The hospitals in this district are conducted on a high plane of efficiency and afford dependable assistance to the physicians employing their service. Without exception, to my knowledge, they are making every reasonably possible effort to comply with the requirements of the American College of Surgeons. No outstanding flagrantcy has come to my notice.

H. M. HALL, Councilor.

REPORT OF THE EXECUTIVE COMMITTEE

House of Delegates, Indiana State Medical Association:
Gentlemen:—

I INTRODUCTION.

Due to the ever increasing volume of business and the rapidly spreading field of activities of the State Association, this year's annual report of your Executive Committee is much longer than usual. Despite this increased length your committee hopes that every doctor will read and, if possible, devote an evening of study to this and the reports of the other standing committees in order to get a better idea of the progress being made by organized medicine in Indiana.

Throughout the year your Executive Committee has met regularly at the Association headquarters office (usually on the second Tuesday of each month) and has discussed in detail and acted upon the many problems that have come before it. Many of these problems have brought forth questions that have been extremely intricate and complicated.

No attempt has been made in this report to cover completely every one of the varied phases of these activities, questions and problems that have taken up the time of the committee throughout the past twelve months, but a few of the major subjects that have come before the committee have been outlined in order that the physicians throughout the state may have a knowledge of the policies of the committee.

The duties of the committee fall naturally under two general headings as follows:

- 1. General executive duties.
- 2. Special duties in administering medical defense of the Association.

Before dealing with these two branches of work, the committee wishes each physician to know that the services of the committee are always available to each member of the Association.

II GENERAL ACTIVITIES.

1. *Better Business Bureau.* The Executive Committee recommends that medical societies in the state join their own Better Business Bureau. In order to start the ball rolling, the Executive Committee carried a membership in the Indianapolis Better Business Bureau in 1928. This membership was discontinued with the recommendation that the various individual county societies join the Better Business Bureau in their respective districts, rather than that the State Association be a member of the Better Business Bureau in only one city of the state. The American Medical Association advocates membership in local Better Business Bureaus and is a member of the National Better Business Bureau.

Incidentally, the Indianapolis Better Business Bureau did an unusually efficient bit of work for the state in particular and the nation in general in closing the Indianapolis Cancer Hospital, owned and operated by Dr. Charles C. Root. The Executive Committee wishes to take the opportunity here of expressing its appreciation for the work of the Better Business Bureau along this line. (For details concerning the Root case see the report of the Bureau of Publicity.)

2. *Rising Rates of Malpractice Insurance.* Despite the fact that the cost of malpractice insurance policies has been raised by many commercial companies in the last few years, the amount charged each member of the Association for medical defense by the Indiana State Medical Association has remained the same. The Indiana Association still continues to offer what is perhaps the best malpractice defense received from any state association, at an extremely low cost.

3. *Indiana-Ohio Special to Annual Meeting at Portland.* Through the Executive Committee arrangements for an Indiana-Ohio special train to Portland were made. Some one hundred and twenty-five physicians and their families from these two states made the trip, visiting Omaha, Denver, Yellowstone and Mount Hood. Many of the party returned from the trip through Canada. The trip was considered pleasant, worth while and successful.

4. *General Financial Policy of the Committee.* The Executive Committee has received numerous requests through the year to finance and sponsor activities which were purely local and not state-wide in interest. The committee has felt that it had no right to vote money for such local requests no matter how worthy their cause. Hence, the committee has made no provision for such expenditures.

5. *Locations for Physicians.* Realizing that a number of communities in Indiana exist where physicians are needed, a list of many of these communities has been prepared at the headquarters office with detailed information. Every attempt is made by the committee to keep this list as up-to-date as possible in order that this information may be available to any physician who may be interested. The Executive Committee wishes to thank the various pharmaceutical concerns of Indiana whose salesmen have recommended locations where physicians may be needed. The committee will be pleased to supply this information to any physician requesting it.

6. *Diphtheria Circulars.* Circulars telling of the value of diphtheria immunization have been prepared by the State Board of Health for distribution to the physicians of the state to be sent out with bills or other correspondence to laymen. The Executive Committee has approved this as a very valuable method of teaching the public the fundamentals of diphtheria prevention and urges that various physicians obtain these circulars from the State Board of Health and enclose them in their letters. These circulars may be obtained free of charge.

7. *Scientific Exhibit.* The Executive Committee wishes to call the attention of the members to the scientific exhibit which is being held this year on the mezzanine floor of the McCurdy Hotel in connection with the annual meeting of the State Association.

8. *Membership.* The secretary of each county medical society has been sent a list of physicians in his county in order that a thorough check might be made of all physicians who are eligible to membership in the Indiana State Medical Association. Reports were received from all but nine county medical societies.

The figures obtained from these reports up to August 15 are as follows:

Delinquent 1 year	69
Delinquent 2 years	85
Total delinquents	154
Non-members who are eligible according to reports from secretaries	118
Total prospective members	272

As the American Medical Association directory shows that there are 4102 physicians in Indiana this means that 1,131 physicians in Indiana never can hope to become members of their county, state or American Medical Association, supposedly because of ethical reasons. The committee expresses regrets at this high number and suggests that ways and means should be taken to determine why so many physicians are not considered desirable as members for their local county societies.

9. *Work of the Committee on the Cost of Medical Care in Indiana.* Following the policy of cooperation adopted by the American Medical Association in regard to the work of the Committee on the Cost of Medical Care, your Executive Committee sanctioned the work of the representatives of the Committee on the Cost of Medical Care in carrying on their survey in Indiana. In every instance the committee has insisted that the representatives of the Committee on the Cost of Medical Care do no work in Indiana without first obtaining the permission from the officers of each local medical society. For further details concerning the survey in Indiana, please see the report of the Bureau of Publicity of the Association.

10. *Questions Referred to the Council.* The following two questions were presented to the Executive Committee of the Indiana State Medical Association by William F. King, M.D., Secretary of the State Board of Health of Indiana, and have been referred for consideration to the Council which meets Wednesday afternoon, September 25, the first day of the annual session at Evansville:

a. Should the State Association adopt standing order for public health nurses of the state?

Dr. King writes as follows concerning this question:

"There is frequent criticism of the work of public health nurses, much of which is justified, because nurses overstep the bounds of propriety and ethics in their contact with patients and even with the public generally. The Public Health Nursing Department of the State Board of Health is constantly besieged by nurses to suggest standing orders by which these nurses can be guided in their work. The Department has always advised that county nurses should take this matter up with the County Medical Society and this has been done in many instances without any result being accomplished so far as action on the part of medical societies is concerned. We feel

that the matter is sufficiently important to be given consideration by the State Association, either through the Council acting for the Association or through a committee that will give some time and thought to the question so that action can be had by the House of Delegates. I would like to see this matter taken up in some way so that action can be had at the Evansville session. It has occurred to me that perhaps the quickest way would be to get the matter before the Council."

b. Should the State Board of Health Laboratory supply the State Tuberculosis Association with the names of positive cases of tuberculosis as found in the laboratory in order that these cases can be referred back to the tuberculosis nurses in the home community of the case?

Doctor King says in regard to this question: "While we believe that this is a helpful thing to do, we realize that laboratory examinations made by physicians are for the information of the physicians and that there is an ethical question involved in this procedure."

These questions were referred to Albert Stump of Indianapolis, attorney for the Association, who answered them as follows:

"At your request I have made some investigation concerning the confidential nature of the reports made to the State Board of Health pursuant to the statutes or rules of the Board requiring such reports; and from that investigation I have the following to report.

"Under Section 8185, Burns 1926, a report is required to be made by all practicing physicians to the health officers of the cities, towns or counties in which any of their patients reside whom they have found to be infected with tuberculosis. The local health officers are required to make reports on or before the 10th day of each month to the State Board of Health, giving the names and addresses of all such persons reported to the local health officers. This statute was enacted in 1917.

"In the Acts of 1907, on page 246, which is Section 8125 of Burns 1926, it was made the duty of State Boards of Health to collect and tabulate vital statistics, and in that connection the law made the following provision with respect to records of births and deaths: 'They shall, upon request, furnish any applicant a certified copy of the record of any birth or death registered under the provision of this act, and such copy of the record of a birth or death, when properly certified by the Secretary of said Board to be a true copy thereof, shall be prima facie evidence in all courts and places of facts therein stated.' This, we believe, is the only statute making a record of the State Board of Health available as evidence.

"But even that statute may not be construed by the courts as effective in making such reports available as evidence in all controversies which may come before courts.

"It was held in *Fondi vs. Boston Mutual Life Ins. Co.*, 224 Mass. 6; 112 N. E. 612, that a copy of the card from the officer of the State Board of Health showing that the sputum sent by insurer's examining physician had been tested and found tubercular was properly excluded, not being a public record.

"Records of health officers kept pursuant to similar statutes in some states have been admitted but there is also authority for the view that statutes requiring records of deaths including the causes of death to be kept by Boards of Health are mere police regulations, and the records being kept for special and local purposes, that is to assist the Board of Health in the conduct of that office, are not public records in such a sense as to make them evidence between private parties of the facts recorded, and a statute authorizing their use as prima facie evidence has been held to apply only to controversies involving public rights. This conclusion was reached in New York, Vermont, Nebraska and Illinois. I have not checked over the decisions in all the states but the courts in the states mentioned constitute respectable authority for the view that even the certificates showing the cause of death would not be admissible under the

statute which specifically declares them to be prima facie evidence in all courts and places of the facts therein stated.

"It is logical to assume that if such a record, in the face of that statute, might be excluded then all other records in the office of the State Board of Health would likewise be excluded as based upon the view that such records are confidential. Certainly if the death certificates could be ruled out and held confidential the other reports from still stronger reasons would also be so regarded.

"The question which Doctor King presents is one having an ethical rather than a legal aspect. If I might, in view of the principles enunciated by the courts in regard to the confidential nature of reports to the State Board of Health, venture a suggestion as to the ethical element involved, it would be that the general interest of the public would probably be better served by giving the names of positive cases of tuberculosis to the State Tuberculosis Association for reference back to the nurses in the home community. If the local physician knew in advance that that would be the procedure followed by the State Board of Health in any positive cases they discovered it seems to me there might be the likelihood of criticism on account of any ethical question involved. This suggestion you will understand is made without having in mind perhaps as clearly as physicians would all of the aspects of that ethical problem; but having in mind the fact that under the law the physician is himself given certain definite responsibilities and duties in regard to the public health as well as in regard to the care and treatment of the individual patient.

"Thus, under the statute itself the confidential nature of the relationship between a physician and his patient is set aside by the requirement in an Act of 1903, which is Sections 8172 to 8183 inclusive, that the physician report all contagious and infectious diseases and providing a penalty for his failure to comply with that statute. The State Board of Health lists in its rules under this statute the diseases that are contagious and must be reported.

"The ethical standards of the profession in regard to the confidential nature of the relationship of the physician and patient, the law gives a place inferior in such diseases to the ethical requirements of the profession in regard to questions affecting the welfare of the public generally. That is to say, the effect of this statute is to place the consideration of public health above the consideration of complete privacy with respect to the condition of the individual."

III MEDICAL DEFENCE ACTIVITIES.

1. *Change in By-Laws.*

a. Changes in the By-Laws of the Association, adopted at the 1928 meeting at Gary, made minor changes in administration of the Medical Defense Fund. Under the new By-Laws, the treasurer of the State Association is the custodian of the defense fund, separately kept, and gives an additional bond to cover this fund.

b. The treasurer pays out money from this fund only on the signed order of the chairman of the Executive Committee and countersigned by the president and chairman of the Council.

c. The committee wishes to call the members attention again to the new provision in the By-Laws which states: "This Association shall not be liable for attorney fees in such malpractice suits unless the Executive Committee shall have first agreed in each case with the physician sued and the attorney representing him in regard to the terms of such employment including the fees to be paid." Several instances have occurred where physicians have been sued, the cases tried and completed and then the Association was asked to pay the bill for the attorney fees. In no case can the Executive Committee be responsible for paying attorneys who have not been employed by the Executive Committee itself. Hence, the committee asks again that members who are threatened

with malpractice suits or are sued get in touch with the headquarters office immediately.

2. Detailed Report of Malpractice Cases Handled by Medical Defense Committee.

A year ago at the time of this report, August 1, 1928, the following 19 cases were pending before the committee and the committee reports the following progress of these 19 cases:

No. 122—Case filed August 1, 1923. Case postponed on account of plaintiff's attorney and may be considered closed on account of want of action. Expense—attorney's fees, \$100, paid April 23, 1925.

No. 123—Filed 1923. Case dismissed on account of insufficient proof of malpractice. No expense.

No. 126—Case apparently dropped.

No. 128—Suit pending. Think case can be definitely dropped soon. Expense—\$175.00, paid October 5, 1925.

No. 129—Case still pending.

No. 134—Suit threatened but never filed. Probably case can be dropped as defendant has died.

No. 139—Suit dropped.

No. 140—Suit pending. Filed February 1, 1926. No further developments and probably there will be none for some time.

No. 142—Suit pending but plaintiff is not pressing suit.

No. 143—Case decided against plaintiff in county circuit court May 14, 1929. Only recourse now is for plaintiff to take case to Supreme Court which he has not yet done. Attorney's bill not yet received.

No. 149—Claim threatened July, 1926. Believe matter can be dropped.

No. 151—Pending. Suit filed July, 1927. No further developments.

No. 153—Closed December 11, 1928. Settlement of \$1500 to plaintiff. Case dismissed and no finding or judgment against physician. Attorney's expense \$100, paid January 17, 1929.

No. 154—Closed May, 1929. Plaintiff withdrew suit on his own accord.

No. 155—Suit threatened.

No. 156—Suit filed March 27, 1928. Case pending.

No. 157—Case closed. Suit filed February 8, 1928. Verdict in favor of physician in circuit court. Expense—\$150, paid January 30, 1929.

No. 158—Case pending. Trial postponed until fall of this year by plaintiff.

No. 159—Suit threatened May, 1928, but suit never has been filed. Case may be considered closed.

Since August 1, 1928, and up to August 1, 1929, the following new cases have come before the committee:

No. 160—Case closed. Suit filed October 25, 1928. Suit withdrawn March, 1929, by plaintiff. Attorney's expense \$148.97.

No. 161—The members of the Executive Committee were unanimous in their opinion that the applicant should not receive medical defense from the Association as he was not a member of the Association, and had never been a member, at the time he rendered the services in question.

No. 162—Case pending.

No. 163—Case closed. Case dismissed February 13, 1929. Attorney's fees—\$100.

No. 164—Case pending. Suit filed April 3, 1929.

The total cost for medical defense was \$498.97, the lowest cost for medical defense since 1926.

IV CONCLUSION.

In conclusion the Executive Committee wishes to quote a letter which was received from a physician from a mid-western society who was collecting data concerning organization work.

"I am writing you to acknowledge the receipts of your communication of January 2nd in reply to questionnaire.

I wish to state that I appreciate very much the pains you have taken and the fullness of your reply.

"I would like to state further that in looking over the replies I have thus far received on the questionnaire, that your organization, as outlined, appeals very much to me, and I have no hesitation in saying that I believe you have the best organization for a state medical society of which I know."

Respectfully submitted.

DAVID ROSS, Chairman,
WM. H. KENNEDY,
CHAS. E. GILLESPIE,
E. E. EVANS,
A. E. BULSON.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

House of Delegates, Indiana State Medical Association:
Gentlemen:

I. Introduction.

With the complications of modern life when the importance of the health of the community depends so much on scientific and preventive medicine, there is, perhaps, no other group whose interest and advice is so vital and important as that of the medical profession. For this reason the Indiana State Medical Association maintains many standing committees all with special duties to perform, but the work of all these committees would go for nothing if the Association was not organized to wage an aggressive, forceful battle through its legislative committee, especially during the months that the state legislature is in session.

Often the officers and members of the Association are asked in a shocked tone, "You don't mean to tell me that *the doctors* are in politics?" And the answer is, "You are right, the doctors of Indiana are in politics. We are in it to look after the interests of the public and to maintain the high standard of education for all those who undertake to treat the sick. We will oppose with all our might men who vote for measures that would tend to break down the present high educational standards and who vote against measures that safeguard the public health. We are in politics in a non-partisan way."

II. Local and State Legislative Activities.

To reflect the best ideals of the profession in an active way has been the purpose of your committee this year during an unusual and most strenuous session of the Indiana General Assembly in which many fad, cult, special interest measures and bills destructive to the public welfare were introduced. Without undue self-appreciation your committee reports that it was successful, for not one single bill which was opposed by the Indiana State Medical Association was passed.

The physicians throughout the state were kept in constant touch with the progress of all bills of special interest to the medical profession during the session of the legislature through weekly confidential legislative bulletins to secretaries and chairmen of the county legislative committees. Reports showing the progress of legislation were carried also from month to month in the JOURNAL, the final report appearing in the May, 1929, JOURNAL on page 219, a summary of which follows:

1. BILLS OF SPECIAL INTEREST TO PHYSICIANS

SIGNED BY GOVERNOR LESLIE:

a. State Budget.

Under the budget the State Board of Medical Registration and Examination will be allowed \$6,000 for investigating purposes for the next two years. This should enable the Board to carry on its work much more efficiently as often it has been hampered in the past by lack of finances.

b. House Bill 189 (Brewster).

Gives medical examiners in insanity inquests 10 cents a mile going to and from inquests as traveling expenses.

(This is in addition to the *per diem* already received by medical examiners in such inquests.)

c. *Senate Bill 159 (Hewitt).*

Requiring county, city and township officials to dispense antirabic serum free to persons too poor to purchase it.

d. *House Bill 304 (Kottkamp).*

Requires students in nurses' training to obtain the required educational work before starting training courses. The present law provides for educational work after training.

e. *House Bill 430 (Harris).*

Fixing fine of not to exceed \$250 and maximum jail sentence of thirty days for possession of Cannabis Sativa and Indica, species of India narcotics, by persons other than wholesale druggists or jobbers or registered pharmacists, except upon prescription of licensed physician, veterinarian or dentist.

f. *House Bill 92 (Worley).*

Permits state board of optometry to investigate complaints of violation of laws concerning that profession and fixes fine of not to exceed \$300 or four months in jail for violation.

2. **BILLS OF SPECIAL INTEREST TO PHYSICIANS WHICH FAILED TO PASS:**

a. *All-time Health Officer Bill.*

Failed to pass in Senate, where it was introduced, through lack of constitutional majority.

3. **BILLS THAT WERE DEFEATED:**

Through the activity of legislative committees and county medical society officers none of the many bills opposed by the State Association were passed. These bills follow:

a. *The Chiropractic Separate Board Bill.*

Introduced by Rep. E. E. McGriff of Portland (Jay County) and A. R. Bernhardt of South Bend (St. Joseph County).

b. *Hospital Bill (John Thiel of Hobart, Lake Co.).*

This bill would have done away with so-called "closed" hospital staffs and would have fixed the control and practice of medicine within the jurisdiction of the State Board of Health. Mr. Thiel finally withdrew the bill.

c. *Malpractice Bill.*

This would do away with expert testimony in malpractice suits. After hearing opposition from the medical profession Senator Otto W. Koenig of Fort Wayne did not push the bill.

d. *Bill Affecting State Board of Medical Registration and Examination.*

Introduced by Representative Cantwell, Terre Haute (Vigo County). Introduced to take care of an individual physician of Rush Medical College who had not proper pre-medic requirements. So widely drawn as to lower general requirements of board.

e. *Beauty Parlor and Barbers' Bills.*

Both the beauty parlor and barbers' bills, which would have created separate licensing boards for these groups, failed to pass. The State Association did not oppose these bills but kept close watch to see that nothing was inserted in them which could be construed to infringe on the practice of medicine.

III. **NATIONAL LEGISLATION OF INTEREST TO PHYSICIANS:**

The legislative committee was called upon several times during the year to cooperate with the Bureau of Legal Medicine and Legislation of the American Medical Association. The state committee did its best to act speedily and effectively in these cases, for the work that Dr. William C. Woodward, director of the Bureau of Legal Medicine and Legislation of the American Medical Association and his assistants are doing at Washington is tremendously important. They keep the state societies informed as to what is going on in Washington during the sessions of Congress just as your state legislative committee attempts to keep your various county medical

societies informed as to what is going on at Indianapolis when the state legislature is in session.

In the past Indiana has had a large part in aiding the American Medical Association in its many battles—notably in the reduction of the narcotic tax and in the movement which finally was successful to allow physicians to deduct traveling expenses incurred in attending professional meetings from their income tax returns. Both Senators Watson and Robinson aided in this battle.

1. *Tariff on Surgical Instruments.*

This spring the new tariff bill increased the tariff on surgical instruments from forty-five to seventy percent. The state committee immediately notified its representatives in Congress and Louis Ludlow, congressman from the Seventh district of Indiana, voiced the protest of the profession on the floor of the House. This matter will be decided definitely at the next session of Congress.

2. *Sheppard-Towner Act.*

Attempts to extend the Sheppard-Towner Act probably will be brought before Congress this winter and under one name or another the battle will be renewed. Your state legislative committee will be guided in its actions by the policies of the American Medical Association in any action that may be taken in this matter.

IV. **ORGANIZATION.**

The state association probably is organized better for legislative work than ever before. The county legislative committees, district legislative committeemen and the central committee coordinate and harmonize the work throughout the state. *Your committee recommends that every county society appoint its legislative committee for 1930 even though it will be an "off" year for the state legislature as there may be need for quick action from home when Congress goes into session.*

V. **DISTRICT LEGISLATIVE MEETINGS.**

District legislative meetings were held in every district last fall and your committee wishes to thank every district legislative committeeman, councilor and officer for the fine manner in which each helped to bring the profession to active participation in legislative work. In nearly every instance there was full representation from each county in each district at these meetings.

VI. **CONCLUSION.**

Your committee feels that no report of theirs would be complete without a mention of the loss of E. R. Zimmerman, M.D., of Elkhart, formerly chairman of the legislative committee of the state association. The committee herewith wishes to express its deepest sympathy to the family and friends of Dr. Zimmerman. Dr. Zimmerman served as chairman of the legislative committee during the 1927 session when the battle raged over the now famous House Bill No. 39, which made the medical practice act enforceable in Indiana. He left his practice at Elkhart and spent almost his entire time during the three months the legislature was in session in Indianapolis. Your committee wishes this to stand as a public acknowledgement of his services.

Respectfully submitted,

JOHN H. HEWITT, Chairman,
LOUIS E. FRITSCH,
O. T. SCAMAHORN.

REPORT OF THE COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

House of Delegates, Indiana State Medical Association:
Gentlemen:—

1. Meeting of the Association of American Medical Colleges.

The Association of American Medical Colleges met in late October at the Indiana University School of Medicine at Indianapolis. There was a large representation of the medical schools of the United States and Canada, and a splendid program. Perhaps of greatest interest locally was the report of the Chairman of this Committee on matriculation in Medical Schools of the United States and Canada. The report, which is the

third annual report prepared by Dean Myers, may be summarized for the past three years as follows:

	1926-27	1927-28	1928-29
Number of applications	20,093	23,590	29,166
Number of applicants	8,500	11,282	12,537
Number of applicants accepted.....	6,420	6,495	7,014
Number of applicants refused.....	3,586	4,519	5,523

It will be observed that, comparing '26 with '28, the number of applicants increased about fifty percent and the number of applications increased fifty percent. Approximately 600 more students were accepted in '28 than in '26, whereas, 2000 more students were refused in '28 than in '26. About two-thirds of the applicants make only one application. They are accepted or refused by the school of their choice, and let it go at that. About one-third of the applicants apply from two to forty times. Of the 3586 students who were refused matriculation in 1926-27, 1339 applied again the following year, and of these, 750 were accepted and 589 were refused a second time. Of these 589 who were refused a second time in 1927-28, 215 applied again in 1928-29, of whom 86 were accepted and 129 were refused for the third time. Of the 4519 men refused in 1927-28, 1673 re-applied in 1928-29, of whom 900 were admitted and 773 were again refused.

2. Council on Medical Education of the American Medical Association.

This committee was represented at the meeting of the Council on Medical Education of the American Medical Association in Chicago in February by its Chairman, who presided at one of the sessions. Perhaps the outstanding feature of this meeting from an educational point of view was the evidence of greater cooperation between Medical Schools and State Boards of Medical Registration and Examination.

3. Medical Education in Indiana.

In the fall of the school year, 1928-29, the Indiana University School of Medicine had 722 applications for matriculation in the Freshman year of the School of Medicine, and perhaps 200 applications for advanced standing. Of these 722, 110 were accepted in the Freshman class of our School of Medicine for the past year. Of those accepted, 102 finally enrolled, the 8 students accepted but not enrolling, had to drop out for scholastic, financial, or health reasons.

While a complete report cannot as yet be made for the school year beginning September 13, 1929, we can say that, while the total number of applications this year will probably not be as great as a year ago, the number of well-qualified applicants this year is about fifty percent greater than a year ago, so that in reality, the difficulty in selecting the members of our class is materially greater than a year ago.

During the school year ending June, 1929, every class of the Medical School had more than 100 students enrolled. This is approximately our optimum limit at this time. This fall we will enroll between 115 and 120 Freshmen. This additional enrollment is accomplished by arranging the course of study of about fifteen students so that a part of their work will be done in the summer session of 1930. This arrangement is necessitated by the fact that in Histology and Physiology Laboratory, work must be done in sections, and only a certain number of sections can be handled during a week. It becomes obvious that an increase in the capacity for enrollment in the School of Medicine must be made at an early date.

Respectfully submitted,

BURTON D. MYERS, Chairman,
S. E. EARP,
WALTER MCFADDEN.

REPORT OF THE COMMITTEE ON CIVIC AND INDUSTRIAL RELATIONS

House of Delegates, Indiana State Medical Association:
SERVICES OF COMMITTEE TO PROFESSION

During the past year your Committee on Civic and

Industrial Relations has served the members of the State Association whenever appealed to, in helping solve the problems resulting from professional care of the injured in industry. The situation resulting from the efforts of insurance companies to reduce the cost of industrial insurance calls for constant vigilance on the part of the medical profession. The organization set up to conduct the insurance business is large and expensive. The solicitation of new business or the holding of present clients cannot be had on a basis of discounted commissions and salaries for those who are the business getters. The clerical workers and office managers and other executives necessary to the handling of the business are not known for their eagerness to have their wages or salaries discounted when pay day arrives. Even the zone surgeons and the medical directors in the home offices may be reasonably assumed to expect their full undiscounted checks.

But when we pass on to those whose misfortunes are supposed to be relieved by insurance and to those who heal the wounds and mend the broken bodies, the principle changes. It would seem that the only chance for economy in industrial insurance comes when the invalid and his family is to be compensated, or the hospital or the doctor is to be paid. The effort seems always to pay the injured as little as possible. This policy is also seen in the hospital situation. It is well known that ward patients even when paying the full ward rate, do not pay their cost to the hospital. Insurance companies insist that industrial cases must go in the wards. In this way the insurance company profits at the expense of the hospital.

It should not be unexpected or a matter of surprise then that this same policy be applied by the insurance adjuster in the payment of medical or surgical service. Hence, the ever recurring task of this committee to help in every way possible to obtain proper fees for services rendered.

FEES IN INDUSTRIAL CASES

Those who treat industrial cases should keep in mind that the fee to be charged in each case should compare with that charged the same individual when injured away from industry. In the long run these same good people who earn their living in industry are our best pay and most satisfactory patients. They are not so critical nor do they demand the preferential attention of the wealthy, who, by the way, often are not so keen or prompt in paying for extra favors.

The cost of medical care is receiving increasing attention through the publicity given in the daily press. The problem is not one of reducing doctors fees, though one would get this impression from his daily reading. The truth is that the great majority of doctors are underpaid, and this is not to the advantage of the public.

By medical care is meant all those different things done for or to the sick from the moment the first pain is felt to the moment of relief and return to duty. With this should be included the loss of income or wages and the suggested scheme or plan to remedy this should include a type of insurance policy that will include the patient's misfortune or illness among the indemnifying features of the policy. This is not always the case. Too often the doctor examines the policy presented by the patient only to find it one of those whose exceptions cover nearly all the common diseases. Sickness and accident policies should not be sold where the exceptions are such as to justify almost the opinion that they border very closely onto fraud. For instance the exception of all diseases "not common to both sexes" is interpreted by the insurance company to include tumors of the prostate. Personal knowledge is had of several cases where premiums had been paid for years and the protection proved worthless when surgery was necessary to remedy the condition on account of this peculiar exception.

The doctor's fees are usually the smallest part of the total cost of medical care. This is readily seen when compared with cost of highly technical diagnoses, special

nursing on the twenty-four, twelve, or eight hour plan, the demand for hospital rooms carrying all the facilities of modern hotel accommodations. Each one of these services rendered can give very good reasons for their costs so that taken singly, they seem well justified. *It would be well worth the effort of this Association to create a competent fact finding board to coordinate these services to the end that needless service, or quality or luxury be eliminated and costs reduced for those who feel the burden of sickness and its attendant anxieties.*

Concern in this regard is felt for those of moderate means—those respectable middle class people who pay their way; those whose annual income ranges from about twenty-five hundred to five thousand. In the purchase of nearly every other commodity a quality may be selected that suits the purchaser's purse. This is not true of medical care. Here the desire is not to cheapen the service. The ideal is the optimum of service, diagnostic and therapeutic, needed in each and every case, an optimum of service always and the cost graded to the earning capacity of the individual. To do this the present system of highly individualized attention will have to be changed possibly to a coordinated service where volume of smaller fees promises adequate remuneration for skilled service.

Nursing service is often used wastefully under the present system. It could very properly be graded. *The present hospital rule that only those nurses who are registered be allowed to practice in the institution works an unnecessary hardship on those who need some nursing care but not of necessity the highest trained.* The highly trained nurse could properly be passed on after the first three to seven post-operative days to another serious case and her place taken by a convalescent nurse who could special two or more convalescents at one and the same time. In this way the nurse could have the way open to greater service at less cost to the patient who would receive all the care needed.

The standardization of hospitals has increased overhead in a way that has become burdensome to many of our smaller institutions. Not always is this increased cost evident in the greater safety or comfort of the patient. The movement has rendered a great service in introducing better and more scientific methods in hospital care and indirectly in hospital managements. It has changed many institutions which were really nothing but "boarding and rooming homes for the sick" into hospitals. In doing this the movement has justified all its cost. But attention is still too much toward the letter rather than the spirit of the movement that prompted the reform. A revaluation of all the requirements of standardization would tend to lessen cost while maintaining and probably improving service.

If the profession would live and grow with every increasing triumph over the common enemy of disease, we must insist that the physician's remuneration be sufficient to encourage him to greater efforts. *Destroy all the hospitals, eliminate all the nursing and technical diagnostic aids and other special services, and the physician's activities would build them up again. But destroy the medical profession and the hospitals would soon be deserted, the nursing, diagnostic and other aids would disappear for want of direction and intelligent use. Any economic situation working hardship on the great body of physicians to the end that they lose their initiative and ambition to achieve, will be an unfortunate situation for the rest of humanity.*

SOME ABUSES

Some of the abuses tending to create unfavorable economic conditions should be mentioned.

The free clinics and educational campaigns for the laity conducted by medical schools, welfare associations and other benevolent organizations are capable of doing an immense service when kept within the limits of educational activities. Too often they are controlled by those ambitious of making a showing of constantly greater service. In achieving this end service is often

extended to those who are able to pay or the nurse or doctor on extension service proceeds to prescribe as well as give advice. The drumming up of business and of public interest by the widespread distribution to the laity of literature recounting pathetic sob stories always with the happy ending of how this or that institution or organization made the little sufferer happy ever after, is not a method calculated to win the support of the medical profession over the state. Responsible officers or trustees could and should take the necessary steps to correct such practices.

The increasing interest of organized medicine in such problems as the ones mentioned in this report is the most encouraging element in the whole situation and is the greatest promise that they will be solved properly.

Respectfully submitted,

F. S. CROCKETT, Chairman,
W. D. NICHOLS,
R. W. S. OWEN.

REPORT OF THE COMMITTEE ON POST-GRADUATE STUDY

No report received.

REPORT OF DIPHTHERIA COMMITTEE

House of Delegates, Indiana State Medical Association:

Gentlemen:—In accordance with a resolution adopted by the House of Delegates three years ago, your Diphtheria Committee has cooperated with the State Board of Health, State Parent-Teachers Association, county medical societies, local welfare organizations and local health officials "with an effort to secure the widest possible use of toxin-antitoxin in the prevention and control of diphtheria in the state of Indiana."

This campaign of education has been to an extent successful, but your committee believes that to become entirely successful the immunization of children against diphtheria must be compulsory. Children entering school should be Schick tested and, if positive, be compelled to have the immunization series before continuing with their studies. Only a small percentage of parents will have their children immunized voluntarily even if it is free of charge. This was demonstrated by the recent survey at Fargo, North Dakota, by the Commonwealth Fund. The committee is working on a plan to bring this information confirming the necessity of immunization to the patients of every physician in Indiana. This plan will be reported at the mid-winter meeting of the Council.

(Signed)

JAMES H. STYGALL, Chairman,
DON MILLER,
WILLIAM STEMM.

REPORT OF COMMITTEE ON NECROLOGY

House of Delegates, Indiana State Medical Association:

Gentlemen:—The fiscal year ending July 18, 1929, finished with a gratifying decrease in the total number of deaths among the members of the medical profession in Indiana, there being eighty-seven in the list for the year as against ninety-three for the preceeding year. In 1923 we had ninety-three deaths; 1924 gave us ninety-two; 1925 had eighty-five; 1926 reached the highest for years with 101; seventy-eight was the list for 1927 and with ninety-three for 1928 we have a decrease of six for the present year's report. This makes the average yearly deaths among the profession for the last seven years 89.6.

The deaths fell within the age periods as follows:

In the thirty-year decade there were two deaths; forty to fifty there were three; fifty to sixty, twenty-two; sixty to seventy, twenty-two; seventy to eighty, twenty-three; eighty to ninety, eight; ninety to one hundred, three. The ages of the remaining number who died could not be ascertained by the committee.

The youngest one of the eighty-seven was Dr. Charles J. Kirshman, of Muncie, who was killed in an automobile accident near Wabasha, Minnesota, August 12,

1928, at the age of thirty-six years. The oldest was that of Dr. Abner H. Shaffer who died at his home in Huntington from influenza January 8, 1929, being long past his 99th year and lacking only one week of being one hundred years of age.

Of the entire group seventy-three were allopaths; three homeopaths; five physio-medicals, and one eclectic while five could not be listed in school preference.

Forty-nine were members in good standing in the Indiana State Medical Association; thirty-eight were members of the American Medical Association and thirteen were Fellows in the latter society. Eleven served in the World War; ten were Civil War veterans, while six saw service in the Spanish-American War.

By months January, 1929, led with twelve deaths; October, '28, was second with eleven; February and May of '29 each had ten; December of '28 had nine; July and August of '28 each had eight; September of '28 and March of '29 each had five; June of '29 had four; November of '28 had three, while April of '28 had the least with only two.

The causes of death are herein listed as follows:

Organic heart, twenty-two; nephritis, seventeen; cerebral hemorrhage and pneumonia, each eleven; accidents, eight; influenza, four; ptomaine poisoning, one; cancer, one; mustard gas, one; arteriosclerosis, one; ethylene gas, one. Of the eight accidents, one was from the explosion of ethylene gas; six were from automobile wrecks and one was by a railway train.

No women were listed in the report. Neither were there any colored doctors among the deceased.

They graduated from the following schools of medicine: Indiana Medical, eighteen; Physio-medical of Indianapolis and Marion, three; Ohio Medical, ten; Homeopathic of Louisville, one; Homeopathic of Chicago, three; Ann Arbor, one; General Medical of Chicago, three; Kentucky School of Medicine, eight; University of Louisville, six; Bennett of Chicago, two; University of Illinois, one; University of Pennsylvania, one; Rush, five; University of Ontario, one; Jenner of Chicago, one; Medical College of Missouri, one; Bellevue, two; Marion-Sims, St. Louis, one; Fort Wayne, two; Western Reserve, Cleveland, two; Jefferson, one; Medical College, Cincinnati, one; Emory University, Atlanta, one, and Meharry of Nashville, one.

The ages of these doctors combined totals 5577 years, giving an average of 64+ years which is just a few months less than the average for the last seven years. The average age reached by members of the profession for the last seven years has been sixty-five years. However, the average life of the physician is yet considerably greater than that attained by the general average of human life.

"Although weathering life's fiercest storms,
The good physician still carries on."

—Oliver Wedell Holmes.

Respectfully submitted,
GEO. G. RICHARDSON, Chairman.

REPORT OF THE COUNTY SECRETARIES CONFERENCE

House of Delegates, Indiana State Medical Association:
Gentlemen:

The first meeting was a breakfast, held on Thursday morning of the Gary session. It was a splendid get-together meeting and a general discussion was carried on. Many valuable suggestions were offered and some of our county societies have benefited by the secretary being present.

The second, or the annual meeting, was held at Indianapolis, May 2. Twenty-four guests were present with about thirty county secretaries. Our guest of honor, Dr. M. L. Harris, of Chicago, gave a pressing invitation to hold the 1930 annual meeting at the A. M. A. building in Chicago. The Conference voted to accept the invitation. Doctor Harris gave a very interesting and helpful address on the subject, "The Economic Value of Med-

ical Service." The subject was so well presented that little was left for discussion. Many important questions were asked and much valuable discussion carried on. All questions were answered satisfactorily by Doctor Harris. A discussion of county society problems and their management was next in order. The following secretaries led the discussion: E. S. Parmenter, Fort Wayne; A. M. Mitchell, Terre Haute; V. L. Turley, Fowler; O. G. Brubaker, North Manchester; A. L. Spinning, Covington, and G. A. Collett, Crawfordsville. We recommend that every county secretary study carefully the plan as outlined by Doctor Harris in his paper. A few of the most important points are found in THE JOURNAL of June, 1929.

Dr. A. M. Mitchell, of Vigo County, was unanimously elected to serve as chairman of the Conference next year.

While we have not been successful in reaching several of our inactive county secretaries, we feel there has been a general increase in interest and enthusiasm over the state to the extent that counties, districts and state will have better programs and better attendance as has been manifested the past year. Some county organizations must elect a new secretary perhaps to have a live society. We urge that all county officers take on new and greater enthusiasm, put forth greater effort than before and make our state one hundred percent active.

We feel there should be some plan adopted whereby small counties may unite with other counties for larger and better programs. This is favored by the Conference if a plan can be found. We look forward to the next year as one of greater achievement and with the help of our State Association JOURNAL and under the able and efficient leadership of Dr. A. M. Mitchell, our county societies should enjoy a year of growth and prosperity.

Respectfully submitted,

J. C. BURKLE, Chairman,
A. M. MITCHELL,
E. M. SHANKLIN,
C. A. STAYTON,
G. A. COLLETT,
E. R. CLARKE.

REPORT OF THE BUREAU OF PUBLICITY

House of Delegates, Indiana State Medical Association:
Gentlemen:—

I. INTRODUCTION.

Since the establishment of the Bureau of Publicity of the Indiana State Medical Association seven years ago the necessity of the education of the lay public has been recognized in many sections of the country and committees similar to the Bureau of Publicity have been established in Illinois, Wisconsin, Colorado, West Virginia and several other states.

Such standard publications as the *Saturday Evening Post* have pointed out the duty of the medical profession toward educating the public and at times has praised the profession for the work it has undertaken along this line. A few quotations from an editorial in the *Saturday Evening Post* gives an idea of this increased interest in preventive medicine and public health education.

"The richest and the least-worked mine of health, happiness and potential wealth lies in the field of preventive medicine. The achievements of modern medicine during the past thirty or forty years may be fairly called stupendous. . . .

"The result of these and other advances is that during the past generation nine years have been added to the span of human life. This long series of medical triumphs, glorious as it is, loses much of its glamour when we reflect that if we gave our doctors full swing they could add another nine years almost immediately. . . .

"Preventive medicine should begin in the home. It should start with the habit of having periodical medical examinations, two or three times a year for

young, old and middle-aged, annually for those in their twenties and thirties. . . ."

1. *Announcements.*

Many announcements and comments from various medical societies have been brought to the attention of the Bureau of Publicity during the past year. Among all those received the Bureau believes the following from the secretary of the Delaware-Blackford County Society to be the best:

"If there were no local, state or national medical organizations:

- What would be the legal status of medical practice?
- What health laws would be on the statute books?
- What kind of medical schools would we have?
- What type of medical meetings would be held?
- What type of medical literature would be published?
- What understanding would there be among physicians?
- What kind of a doctor would you be?"

2. *Comments Concerning the Work of the Bureau.*

Since the establishment of the Bureau letters of commendation concerning the work of the Bureau have been received from many different sources. The Bureau in its report merely wishes to quote from a letter received from the Secretary of the American Medical Association which reads as follows:

"It is a splendid thing that county medical societies are working in such close cooperation with the Bureau of Publicity of the Indiana State Medical Association, and it is especially encouraging that matters of the kind referred to in our recent correspondence are being referred to the Bureau for its careful consideration and for opinion and advice. I think the Bureau of Publicity is doing splendid work and, from all that I can hear about it, its work is generally appreciated in the state."

II. REQUESTS RECEIVED BY BUREAU.

1. *Availability of Bureau Service.*

The Bureau continues its custom of meeting once a week at the headquarters office, 804 Hume-Mansur Building, Indianapolis. This frequency of meeting enables the Bureau to be a very active agency and makes the services of the Bureau to the lay press and the lay public available on all occasions. Officers of other state associations often have expressed surprise that physicians engaged in private practice will devote from one to three hours each week to the consideration of the various details that are presenting themselves constantly before the Bureau.

2. *The Requests.*

Many institutions, organizations and individuals throughout the state wrote or took up in person with the Bureau of Publicity matters of one nature or another during the year. Some of the requests which the Bureau felt were against the best interest of public health were openly opposed by the Bureau. In several instances the Bureau withheld its approval but took no action in opposition. Still other movements received the wholehearted support of the Bureau. Among the groups that called upon the Bureau and in some form or other were aided by the Bureau were: The Committee on the Cost of Medical Care, various Y. M. C. A. Health Weeks in Indiana, the Early Diagnosis Campaign of the Indiana State Tuberculosis Association, National Child Health Week, National Hospital Day, Indianapolis Council of Social Agencies, Indiana Health Council and the Indiana Parent-Teachers' Association.

The Bureau refused to sanction many requests for the establishment of free baby clinics, several group advertising campaigns, etc. But whether or not the Bureau of Publicity approved a movement, invariably the point was brought out clearly that the approval of the local county medical society should be obtained in every instance and that no individual physician's name but the name of the local county medical society should be used in promoting any health week, health demonstration, hospital week, etc. The organizers of these various movements were repeatedly warned that they should guard against

any advertising or unethical physicians taking advantage of the various health programs, demonstrations, etc., to further their own selfish interests.

III. ADVERTISING.

Many questions have been brought before the Bureau during the past year as to what constitutes unethical advertising. In order that the general profession may have a clear idea of this the Bureau herewith makes the following statement:

"Judging from the Code of Medical Ethics of the American Medical Association as to what is ethical advertising it would appear that advertising of any kind is unethical except insofar as it conveys information as to the name and the location of the office of a physician together with a statement of his office hours. In addition it is allowable for a physician to state his specialty if he so desires. This, however, would seem to be a matter of personal taste and it is not forbidden under the interpretation that the Bureau of Publicity places upon the Code of Medical Ethics of the American Medical Association.

"Giving the permitted information referred to above in so-called display advertising would, of course, raise the question as to its propriety.

"In the Principles of Medical Ethics, published by the American Medical Association, Chapter II, Section 4, pages 7 and 8, deals with advertising. It says in part:

"Solicitation of patients by physicians as individuals, or collectively in groups by whatever names these be called, or by institutions or organizations, whether by circulars or advertisements, or by personal communications, is unprofessional. This does not prohibit ethical institutions from a legitimate advertisement of location, physical surroundings and special class—if any—of patients accommodated. . . . The publication or circulation of ordinary simple business cards, being a matter of personal taste or *local custom*, and sometimes of convenience, is not *per se* improper. *As implied, it is unprofessional to disregard local customs and offend recognized ideals in publishing or circulating such cards.*"

IV. ACTIVITIES OF BUREAU IN COOPERATING WITH VARIOUS PUBLIC HEALTH GROUPS.

A resolution was passed by the House of Delegates two years ago authorizing the Bureau to act "as a special committee to confer with similar committees appointed by voluntary health agencies on matters pertaining to the work of these public health organizations and their relation to the medical profession." In accordance with this authority the Bureau of Publicity cooperated with the following organizations during the year:

1. *Indiana Tuberculosis Association.*

The Indiana State Medical Association cooperated with the Indiana Tuberculosis Association in the 1929 Early Diagnosis Campaign, a nation-wide publicity movement of the National Tuberculosis Association. The campaign was intended to bring about the early diagnosis of tuberculosis and a broader knowledge of the subject. The Publicity Bureau prepared several articles and in addition gave the Marion County Tuberculosis Association its regular weekly broadcasting hour over WFBM for a series of four talks. The titles of these four talks follow:

- The Importance of Early Diagnosis of Tuberculosis.
- The Importance of Early Diagnosis of Cancer.
- The Importance of Early Diagnosis of Heart Disease.
- The Importance of Early Diagnosis of All Diseases.

All of these articles stressed the need of the annual health examination.

In giving this time to the speakers of the Marion County Tuberculosis Association, the provision was made that the following rules would be observed:

- a. The name of no physician in private practice shall be mentioned.

b. All material broadcast with the approval of the Bureau must be read and approved by the Bureau of Publicity before it is broadcast.

c. The material broadcast is given under the name of the Bureau of Publicity of the Indiana State Medical Association and not under the name of any individual physician.

2. Third Annual Conference of Public Health.

The third annual conference on Public Health was held under the direction of the American Medical Association at Chicago March 29 and 30. The Bureau of Publicity sent a representative to attend this conference. For detailed report of this conference see page 197 of the May number of the JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION.

V. SUPPRESSION OF MEDICAL FRAUDS.

As in the past, the Bureau of Publicity has been active in cooperating with the various authorities of the state to suppress medical frauds in one form or another. The outstanding event in this line during the year was the abolition of the Indianapolis Cancer Hospital through the efficient work of the Better Business Bureau of Indianapolis. Details of this case follow:

1. Indianapolis Cancer Hospital.

For a number of years the Publicity Bureau has cooperated with Robert Bryson, postmaster, of Indianapolis, and T. M. Overley, manager of the Indianapolis Better Business Bureau, in their work of keeping prospective victims from falling into the clutches of C. C. Root, director of the Indianapolis Cancer Hospital. The Root Hospital carried on intensive advertising campaigns usually through small weeklies, mostly in the west and south and as a result obtained many patients from the rural districts. Often letters asking for information upon the Indianapolis Cancer Hospital were received by the postmaster. These letters were turned over to the Publicity Bureau for answers. Many dollars undoubtedly were saved these poor people who asked for uncolored information concerning this hospital. Lives undoubtedly were saved. Finally, after spending several years to accumulate, without a question of doubt, substantial evidence against Dr. Root and his hospital, the Better Business Bureau preferred charges against Dr. Root asking that his license be revoked by the State Board of Medical Registration and Examination. Following a two day's hearing, which was characterized by Dr. Root's utter lack of scientific knowledge of cancer and his attorney's flight of oratory, the State Board of Medical Registration and Examination, without a dissenting vote, found Doctor Root guilty. The case was well handled by the Better Business Bureau. The Bureau of Publicity unhesitatingly voices its gratitude for the fine work of the Better Business Bureau.

2. Henry Junius Schireson.

Henry Junius Schireson whom the American Medical Association asserts is a "self-styled plastic surgeon with a professional record that reeks to heaven," attempted to get a foot-hold in Indiana by speaking to at least one group of business women of the state. Through the Bureau of Publicity the information concerning Doctor Schireson was placed in proper hands and his invitation was withdrawn.

3. The "Dr." Albert Ernest George Hall Case.

Through the activities of the Better Business Bureau, Hall, who advertises himself as Dean of the American Academy of Psychological Research, was forced to cut short his campaign in Indianapolis and leave the city. It is alleged that Hall posed as a regular licensed physician although no records are in existence at the American Medical Association showing that he ever graduated from a reputable medical school.

VI. SPEAKING ENGAGEMENTS.

Throughout the year many requests have come to the Bureau of Publicity to supply speakers for both medical and lay meetings. At least one of these requests has come from out of the state. The following meetings have

been addressed since the last annual report of the Bureau of Publicity:

1928

- Aug. 2—Grant County Medical Society, Marion, Indiana.
- Aug. 21—Bedford Kiwanis Club, Bedford, Indiana.
- Aug. 27—Joint Meeting of Benton County Medical Society with Teachers' Institute and Parent-Teachers Association, Fowler, Indiana.
- Sept. 20—Connersville Kiwanis Club, Connersville, Indiana.
- Nov. 1—Clinton County Medical Society, Frankfort, Indiana.
- Nov. 13—Tri-County Medical Society, Columbus, Indiana.
- Nov. 15—Muncie Exchange Club, Muncie, Indiana.

1929

- Jan. 3—Fountain-Warren County Medical Society, Veederburg, Indiana.
- Jan. 22—Delaware-Blackford County Medical Society, Muncie, Indiana.
- May 15—Muncie Kiwanis Club, Muncie, Indiana.
- June 4—County Medical Society, Danville, Illinois.
- July 31—Muncie Kiwanis Club, Muncie, Indiana.

VII. NEWSPAPER RELEASES.

1. Comments Upon Releases.

The newspaper releases prepared by the Bureau continue to receive wide distribution, requests coming for them not only from many of the states in this country but also from Europe.

Further recognition of the work of the Bureau is shown by the fact that the Colorado State Medical Society sent its secretary to Indiana to make a study of the Bureau of Publicity and the various committees and the headquarters office of the Indiana State Medical Association. This representative from Colorado spent two days in Indianapolis going over in detail the work of the Indiana organization.

Among the requests for information is a letter from the Toledo Academy of Medicine, Lucas County, asking for information concerning the work of the Bureau. This Ohio organization is conducting a very successful newspaper publishing campaign for the educating of the lay public and is one of the pioneer organizations of this work.

2. Distribution.

These releases are distributed as follows:

- a. Eight hundred to Mrs. Edna Hatfield Edmondson, field worker of the Extension Division of the Indiana University, to be distributed from there to the women's clubs and parent-teachers' associations of the state each week. Fine results are being obtained from this distribution through the cooperation of the Extension Division of Indiana University.
- b. One hundred to Nurses Board of the State.
- c. Fifty to the secretary of the Indianapolis Women's Christian Temperance Union.
- d. Each councilor and secretary of each county medical society gets a copy of each article.
- e. Editors of 250 newspapers and magazines of the state receive copies. Besides these, the articles are carried in the *Hoosier Health Herald* of the Indiana Tuberculosis Association and several other health publications of the state, including twelve religious, fraternal and farm journals.
- f. Special distribution is made to the press associations, the United Press, International News Service and Associated Press. The articles run about one-and-a-half double space type-written pages in length, and although the news services do not carry them over their state wires and through their state letters in complete form, they have been carrying them in summarized form.

The Bureau wishes to thank Edna Hatfield Edmondson, Executive Secretary of the Parent-Teachers' Association, in aiding the Bureau in the distribution of the newspaper bulletins.

3. Newspaper Releases Published Since Last Report of Bureau.

Preparation of Children for School.
 Gary Meeting.
 Hoosierland's Health Harvest.
 Ringworm a New (?) Disease.
 Competitive Athletics.
 Bright's Disease—Part I.
 Bright's Disease—Part II.
 Christmas Hint from the Physicians.
 A Healthy Hoosier Winter.
 Conquest of Disease.
 John R. Kissinger—A Yellow Fever Hero.
 Sinus Trouble.
 Our Debt to Animals.
 Spring Tonics and Spring Fever.
 Undulant Fever
 Spring Drive Against Tuberculosis.
 So-called Cancer Cures.
 Open Season for May Queens.
 Vacation and Typhoid Fever.
 National Hospital Day.
 Cracked Toes.
 Prevent Hay Fever Now.
 The Barefoot Boy.
 Safe and Sensible Swimming.
 Sunlight, Suntan and Sunburn.
 A Safe and Sane July Fourth.
 Hot Weather Health Hints.
 Iced Drinks in Hot Weather.
 Strenuous Week-ends.

VIII. RADIO RELEASES.

Radio talks have been given each week throughout the year on Saturday night over WFBM of the Indianapolis Power and Light Company. Most of these talks have been five minutes in length and from time to time officials of the various city and state health departments and hospitals have made talks at the time allotted the Bureau of Publicity. A list of these talks follows:

1. Radio Talks.

Protection Against Typhoid Fever.
 Preparation of Children for School.
 Competitive Athletics.
 Shock.
 Shock Troops Against Disease.
 Airplane Stunting for Deafness.
 Hoosierland's Health Harvest.
 Ringworm a New (?) Disease.
 Bright's Disease—Part I.
 Bright's Disease—Part II.
 Nature Curing or Physical Therapy.
 High School Basketball and Health.
 Christmas Hint from the Physicians.
 Diphtheria.
 A Healthy Hoosier Winter.
 The Conquest of Disease.
 Sleeping Sickness.
 Talk by Superintendent of Indianapolis City Hospital.
 The History of Influenza.
 Our Debt to Animals.
 Sinus Trouble.
 Early History of Anaesthetics.
 Spring Tonics and Spring Fever.
 Early Diagnosis Campaign Against Tuberculosis.
 The Importance of the Early Diagnosis of Tuberculosis.
 The Importance of Medical Supervision of Child Contact Patients of Tuberculosis—Secretary of the State Board of Health.
 The Prevention of Heart Disease.
 Cancer.
 National Hospital Day.
 Cracked Toes.
 Vacation and Typhoid Fever.
 Prevent Hay Fever Now.
 The Barefoot Boy.
 Safe and Sensible Swimming.

Poison Ivy.

A Safe and Sensible Fourth.
 Hot Weather Health Hints.
 Iced Drinks In Hot Weather.
 Strenuous Week-ends.
 Rabies or Hydrophobia.
 Running Water Is Not Always Pure.
 Sunlight, Suntan and Sunburn.
 Insects That Carry Disease.

2. Broadcasting Rules.

The Bureau has adopted a rule that no physician who is in private practice should have his name mentioned over the radio in connection with the Bureau of Publicity broadcasts. The names of physicians holding public office and connected with public institutions may be mentioned over the radio.

IX. USE OF THE RADIO BY MEDICAL FRAUDS AND QUACKS.

Promiscuous use of radio broadcasting stations by medical fakes, quacks and frauds of all sorts has caused a good deal of comment among the profession. In order to eliminate some part of that of local origin, the Publicity Bureau often has given to the heads of the various radio stations from time to time facts concerning medical fraud advertising. In some instances this information has caused radio stations to refuse the use of the air to concerns who are advertising "fake" treatments and remedies to the public. Not much headway can be made in this, however, until official action is taken by a legally constituted agency having authority over broadcasting to prohibit these commercial concerns from exploiting the public. At the present time the facilities of the radio chains are for sale and under the law one man has as much right to broadcast as anyone else so long as he can pay the bills.

X. SURVEY OF THE COMMITTEE ON THE COST OF MEDICAL CARE.

For many weeks the Bureau of Publicity has considered and discussed in detail the survey of the Committee on the Cost of Medical Care which is under way. Following the policy of the American Medical Association the Publicity Bureau gave its full support to obtaining data desired by the Committee. At the beginning this support was largely that of urging the physicians to fill out and return the detailed questionnaires sent out by the Committee on the Cost of Medical Care. Later on it fell to the lot of the Bureau to meet and talk to representatives of the Committee who had been sent into Indiana to make a detailed study of the situation in Indiana in various parts of the state. Mr. Allon Peebles, representing the national committee, carried on an intensive survey in Shelby County and other surveys have been carried on by other agents of the committee in other parts of the state. In each case the committee has given its approval to the investigations being made by the Committee on the Cost of Medical Care providing that the survey in each case was met with the consent of the local county medical society involved.

XI. FINANCIAL REPORT OF THE BUREAU.

The expenditures of the Bureau from August 1, 1928, to August 1, 1929, follow:

Clipping service	\$ 84.40
Postage	133.35
Stationery and mimeograph supplies	132.31
Traveling expenses of speakers	91.18
Miscellaneous	19.09

Total expense\$460.33

The Bureau was allowed by the Budget Committee, \$550.00 for the year of 1929. Of this amount the committee has spent \$270.97 from January 1 to August 1, 1929, leaving a balance of \$279.03 unexpended in the budget for the remainder of 1929.

Respectfully submitted,

WILLIAM N. WISHARD, M.D., Chairman.
 C. P. EMERSON,
 J. A. MACDONALD.

REPORT OF DELEGATES TO THE A. M. A.

House of Delegates, Indiana State Medical Association:

Gentlemen:—The Delegates to the American Medical Association respectfully refer you to the report concerning the activities of the Portland session of the A. M. A., as printed in the editorial columns of this issue of THE JOURNAL. We, therefore, deem it unnecessary to duplicate that report. Your delegates were faithful in attendance and all were represented in one way or another upon important committees.

Respectfully submitted,

ALBERT E. BULSON,
E. M. SHANKLIN,
HARRY ELLIOTT,
DAVID ROSS.

LIST OF PRESIDENTS OF THE INDIANA STATE MEDICAL ASSOCIATION SINCE ITS ORGANIZATION

<i>Names and Residents</i>	<i>Elected</i>	<i>Served</i>
Livingston Dunlap, Indianapolis	1849	1849
William T. S. Cornett, Versailles	1849	1850
Asahel Clapp, New Albany	1850	1851
George W. Mears, Indianapolis	1851	1852
Jeremiah H. Brower, Lawrenceburg	1852	1853
Elizur H. Deming, Lafayette	1853	1854
Madison J. Bray, Evansville	1854	1855
William Lomax, Marion	1855	1856
Daniel Meeker, Laporte	1856	1857
Talbott Bullard, Indianapolis	1857	1858
Nathan Johnson, Cambridge City	1858	1859
David Hutchinson, Mooresville	1859	1860
Benjamin S. Woodworth, Fort Wayne	1860	1861
Theophilus Parvin, Indianapolis	1861	1862
James F. Hibberd, Richmond	1862	1863
John Sloan, New Albany	1863	1864
John Moffet (acting), Rushville	1864	1864
Samuel M. Linton, Columbus	1864	1864
Myron H. Harding, Lawrenceburg	1865	1865
Wilson Lockhart (acting), Danville	1865	1866
Vierling Kersey, Richmond	1866	1867
John S. Bobbs, Indianapolis	1867	1868
Nathaniel Field, Jeffersonville	1868	1869
George Sutton, Aurora	1869	1870
Robert N. Todd, Indianapolis	1870	1871
Henry P. Ayres, Fort Wayne	1871	1872
Joel Pennington, Milton	1872	1873
Isaac Casselberry, Evansville	1873	1874
Wilson Hobbs, Knightstown	1873	1874
Richard E. Haughton, Richmond	1874	1875
John H. Helm, Peru	1875	1876
Samuel S. Boyd, Dublin	1876	1877
Luther D. Waterman, Indianapolis	1877	1878
Louis Humphreys, South Bend	1878	1879
Benj. Newland (acting), Bedford (v-p)	1878	1879
Jacob R. Weist, Richmond	1879	1880
Thomas B. Harvey, Indianapolis	1880	1881
Marshall Sexton, Rushville	1881	1882
William H. Bell, Logansport	1882	1883
Samuel E. Munford, Princeton	1883	1884
James H. Woodburn, Indianapolis	1884	1885
James S. Gregg, Fort Wayne	1885	1886
General W. H. Kemper, Muncie	1886	1887
Samuel H. Charlton, Seymour	1887	1888
William H. Wishard, Indianapolis	1888	1889
James D. Gatch, Lawrenceburg	1889	1890
Gonsolvo C. Smythe, Greencastle	1890	1891
Edwin Walker, Evansville	1891	1892
George F. Beasley, Lafayette	1892	1893
Charles A. Daugherty, South Bend	1893	1894
Elijah S. Elder, Indianapolis	1894	1895
Charles S. Bond (acting), Richmond	1894	1895
Miles F. Porter, Fort Wayne	1895	1896
James H. Ford, Wabash	1896	1897
William N. Wishard, Indianapolis	1897	1898
John C. Sexton, Rushville	1898	1899

Walker Schell, Terre Haute	1899	1900
George W. McCaskey, Fort Wayne	1900	1901
Alambert W. Brayton, Indianapolis	1901	1902
John B. Berteling, South Bend	1902	1903
Jonas Stewart, Anderson	1903	1904
George T. MacCoy, Columbus	1904	1905
George H. Grant, Richmond	1905	1906
George J. Cook, Indianapolis	1906	1907
David C. Peyton, Jeffersonville	1907	1908
George D. Kahlo, French Lick	1908	1909
Thomas C. Kennedy, Shelbyville	1909	1910
Frederic C. Heath, Indianapolis	1910	1911
William F. Howat, Hammond	1911	1912
A. C. Kimberlin, Indianapolis	1912	1913
John P. Salb, Jasper	1913	1914
Frank B. Wynn, Indianapolis	1914	1915
George F. Keiper, Lafayette	1915	1916
John H. Oliver, Indianapolis	1916	1917
Joseph Rilus Eastman, Indianapolis	1917	1918
William H. Stemm, North Vernon	1918	1919
Charles H. McCully, Logansport	1919	1920
David Ross, Indianapolis	1920	1921
William R. Davidson, Evansville	1921	1922
Charles H. Good, Huntington	1922	1923
Samuel E. Earp, Indianapolis	1923	1924
E. M. Shanklin, Hammond	1924	1925
C. N. Combs, Terre Haute	1925	1926
Frank W. Cregor, Indianapolis	1926	1927
George R. Daniels, Marion	1927	1928
Charles E. Gillespie, Seymour	1928	1929

EXHIBITORS AT EVANSVILLE SESSION OF THE INDIANA STATE MEDICAL ASSOCIATION

SEPTEMBER 25, 26, 27, 1929

- A. S. ALOE COMPANY, St. Louis, Missouri.
AKRON SURGICAL HOUSE, Indianapolis.
AMERICAN X-RAY CORPORATION, 711 W. Lake St. Chicago, Illinois.
WM. H. ARMSTRONG COMPANY, Indianapolis, Indiana.
CAMERON'S SURGICAL SPECIALTY COMPANY, 666 West Division St., Chicago, Illinois.
CENTRAL PHARMACAL COMPANY, Seymour, Indiana.
COLUMBUS PHARMACAL COMPANY, Columbus, Ohio.
FOSTER & MESSICK, Managers, U. S. FIDELITY & GUARANTY COMPANY, Indianapolis, Indiana.
GERBER PRODUCTS DIVISION, FREMONT CANNING COMPANY, Fremont, Michigan.
HOOSIER PHARMACAL COMPANY, Indianapolis, Indiana
HORLICK'S MALTED MILK COMPANY, Racine, Wisconsin.
THE KELLOGG COMPANY, Battle Creek, Michigan.
LEDERLE ANTITOXIN LABORATORIES, 511 Fifth Ave., New York City.
MEAD JOHNSON AND COMPANY, Evansville, Indiana.
MEDICAL PROTECTIVE COMPANY OF FORT WAYNE, 360 North Michigan Blvd., Chicago, Illinois.
MELLIN'S FOOD COMPANY, Boston, Massachusetts.
MOUNTAIN VALLEY WATER COMPANY, Indianapolis, Indiana.
V. MUELLER & COMPANY, 408 South Honore Street, Chicago, Illinois.
PETROLAGAR LABORATORIES, INC. (formerly Deshell Laboratories, Inc.), 536 Lake Shore Drive, Chicago, Illinois.
PITMAN-MOORE COMPANY, 1220 Madison Ave., Indianapolis, Indiana.
W. B. SAUNDERS COMPANY, West Washington Square, Philadelphia, Pennsylvania.
STANDARD PHARMACAL Co., 847 W. Jackson Blvd., Chicago, Ill.
SWAN-MYERS COMPANY, 219 North Senate Ave., Indianapolis, Indiana.
TAILBY-NASON COMPANY, Boston, Massachusetts.

THE JOURNAL of the

Indiana State Medical Association

Devoted to the Interests of the Medical Profession of Indiana

ALBERT E. BULSON, B.S., M.D., F.A.C.S.
Editor and Manager

Office of Publication, 406 W. Berry St., Fort Wayne, Ind.

SEPTEMBER, 1929

EDITORIALS

OUR PRESIDENT

The president of the Indiana State Medical Association for the year 1929 is Charles E. Gillespie, M.D., of Seymour, Indiana. He was born in Crothersville, Indiana, July 19, 1877. He graduated from the Central College of Physicians and Surgeons in Indianapolis in 1901. From the date of his graduation until the year 1911 he was in general practice in Crothersville, and since then he has been engaged in the practice of ophthalmology and otolaryngology in Seymour where, in the Seymour Clinic, he has charge of a department devoted to his specialty. Dr. Gillespie has been active in medical organization work, and recently served as a councilor for the Association.

THE DEADLY LIP INFECTION

"Until one comes face to face with a fatality, the result of simple infection of the upper lip, one is apt to underestimate the possibilities connected with such a simple lesion and to regard it as an innocent affair." With this statement, Dr. H. J. Jurgens prefaces a paper which appears in the April number of the *Illinois Medical Journal*, and the warning, "Pay serious attention to the upper lip infection," not infrequently deadly in its effects, is worth heeding.

A few years ago, the editor of *THE JOURNAL* saw a case of infection of the vestibule of the nose caused by picking an ordinary pimple. A rapidly developing abscess seemed to require surgical interference consisting of simple evacuation of pus, but the patient developed a temperature of over 105 degrees, accompanied by delirium, and death ensued within forty-eight hours. The case was similar to three or four seen during an experience of more than thirty-five years. As stated by Dr. Jurgens in the article to which we have referred, the fatal results in so many of these infections come so unexpectedly that they are more than ordinarily tragic in their effects both upon the medical attendant and upon the family. The necessity for a guarded prognosis is, therefore, evident. While incision and evacuation of pus in other localities generally is attended by an amelioration of the symptoms, in these cases of upper lip infection, or infections about the vestibule of

the nose, the affection frequently goes on to a fatal ending in spite of all care.

Four reasons for the deadly nature of this trouble are given by Dr. Jurgens: First, the anatomical makeup of the parts involved; second, the trauma; third, absence of physiologic rest; and fourth, the facility for rapid multiplication of organisms. In considering the anatomy of the parts (quoting Jurgens) we find that in the upper lip the muscular fibers run in various directions with little room for expansion when fluids accumulate under the skin. The blood and lymphatic supply is very extensive, and the least motion or contraction of the muscular fibers causes a temporary local disturbance in the blood supply. The whole field is divided into a number of small cavities, separated from one another by fibers, and having little or no communication with each other. Foreign material very easily is pressed into the venous channels. The trauma produced by the knife increases the pressure in the venules, and when once the vein walls have become infected, phlebitis develops, followed by thrombophlebitis. Then again it is known that the circulation in this region has a direct communication through the superior ophthalmic with the cavernous sinus, and through the main trunk of the anterior facial it enters into the internal jugular. The venous blood from the nostril and the lower part of the lining of the nose is carried by small veins through the foramen cecum at the root of the nasal spine of the frontal bone to the superior longitudinal sinus. Thus we have four routes of infection: first, the angular vein, superior ophthalmic vein into the cavernous sinus; second, by means of the main branch of the anterior facial to the internal jugular vein and from there to the heart and lungs; third, by means of the small nasal veins through the foramen cecum into the longitudinal sinus, then into the lateral sinus causing a thrombophlebitis of the lateral sinus and eventually a thrombosis into the internal jugular vein; fourth, infection of the general blood stream by direct extension of the cellulitis and lymphangitis.

The start usually is furnished by the patient himself, who in the early stages usually picks or squeezes the little pimple on the lip or in the vestibule of the nose. The continual use of the lip in talking and in taking nourishment produces a pressure in the lip substance which is conducive to pressure of infective material into the lymph spaces and small venules. Multiplication of organisms in this part of the body is due to the fact that owing to the limited space, infiltration of round cells and extravasation of white cells is limited so that a very weak wall of leucocytes is thrown out to protect the general system from the local infection. The organism in most cases has been found to be *staphylococcus aureus*, and it is well known that this organism is not very virulent, but it seems that it may acquire a high

degree of virulency in the process of multiplication of the bacteria *in loco*. There is rapid development of swelling, pain, fever, and oftentimes within a few hours the symptoms of meningitis. As Dr. Jurgens says, "If the infection travels through the nasal lining membrane to the superior longitudinal sinus, soon the symptoms of meningitis put in an appearance and that overshadows the picture until the end. Should it follow the course of the anterior facial vein, which it is very apt to do because of the absence of valves in this vein, then very likely the first outstanding symptoms will be chills, high temperature, and the symptoms of embolism in the lungs. Should the infection ascend by means of the angular vein to the superior ophthalmic vein, then a rapid involvement of the cavernous sinus, manifested by symptoms of cavernous sinus thrombosis consisting of muttering delirium, unconsciousness and meningitis will obtain. The end of this picture will be death due to toxemia overwhelming the higher centers, and edema due to stoppage of the venous circulation at the base of the brain. Should the infection spread by contiguity, causing a cellulitis and lymphangitis of the cheek, the lower lid, nose and forehead, then we may expect an extension downward into the neck, with involvement of the lymph glands and finally death due to general septicemia."

So far as treatment is concerned, it has been laid down as a rule by nearly all authorities that infections about the face should be treated in the beginning by absence of all radical methods. Furthermore, the pernicious habit of trying to open and squeeze lesions of this kind should be condemned, and a form of treatment should be adopted which places the part as nearly as possible at physiologic rest by prohibiting speaking and the use of solid foods with any motion of mastication. Hot, moist applications will prove beneficial. In the treatment of this serious manifestation authorities are agreed that if incision is used it is never indicated before the stage of fluctuation. *Early incisions have been responsible for many fatalities.* If infection travels toward the superior longitudinal sinus, the surgeon is helpless. If it follows the angular vein on its way to the cavernous sinus through the ophthalmic vein, then ligation of the vein just below the inner canthus, if done early enough, may stop the further progress of the disease and save the patient's life. Should it take the third route, following the anterior facial vein on its way to the internal jugular, the ligation of this vein at the angle of the jaw, together with ligation of the angular vein below the inner canthus, may prove to be a life-saving procedure. Should the disease progress by means of contiguity in the soft structures following the lymph route toward the neck, early incision of the indurated tissue of the neck, together with hot applications, may save the patient.

Inasmuch as these cases of lip infection are so frequently fatal, it is necessary to explain to the patient the seriousness of the condition in order to obtain active cooperation, and extreme care is needed in the management, together with a very guarded prognosis.

"THE AMERICAN COLLEGE OF SURGEONS IS THE 'BUNK' "

The title of this editorial represents a remark made by a prominent and highly respected Fellow of the American College of Surgeons in commenting upon the laxity of the organization in upholding its professed ideals and principles. We are not prepared to condemn all that has been done by the American College of Surgeons, for we believe that great good has been accomplished by that organization in spite of its dereliction in fulfilling its obligations and promises. Probably most of the medical men who have become Fellows of the College identified themselves with the organization because of its high ideals, and because the organization presumably represented a principle of far-reaching value to medical profession and public alike, which should be endorsed and supported by right-thinking medical men. Within recent years much has occurred to make many of these Fellows of the College lose faith in and respect for the College, and in consequence are quite willing to subscribe to the blunt remark of a leading surgeon that the American College of Surgeons is "bunk". As we have said before, and now repeat, there can be no doubt that standardization of hospitals by the College has brought about improved conditions, but it is utter nonsense for anyone to say that all of the hospitals approved by the American College of Surgeons have lived up to the rules, regulations and recommendations which have formed the requirements for approval. Furthermore, even the approval of some hospitals seems to have been secured by questionable methods, both on the part of the hospitals and on the part of those representing the College who have had that matter in hand. Some so-called approved hospitals are permitting inexperienced and untrained men to operate, with the inevitable result of increasing the morbidity and mortality rate. So far as living up to the ethical standards of the College is concerned, there is good and sufficient reason for believing that the American College of Surgeons either winks at or whitewashes infractions of the pledge to which all Fellows subscribe, to say nothing of breaking all of the rules of decency and honesty. One doesn't have to belong to the American College of Surgeons in order to be ethical and honest in all of his dealings in connection with the practice of medicine, and on the other hand, Fellowship in the American College of Surgeons does not mean that the possessor of the Fellowship always is to be trusted for ethical conduct, for it is fairly well understood that the Fellowship list of the

American College of Surgeons is honeycombed with the names of the rankest kind of fee-dividers. Complaints made to the powers-that-be in the palatial office of the American College of Surgeons in Chicago apparently fall on deaf ears, but the time soon will arrive when there will be an explosion in the College that will be heard around the world unless something is done and done quickly to purify the organization. A great convocation and business session is scheduled to be held in Chicago next month. That offers an opportunity for the American College of Surgeons to adopt procedures for fumigating and sterilizing an organization that certainly needs drastic treatment to cure it of its ills.

THE PORTLAND SESSION OF THE A. M. A.

This year's session of the American Medical Association, held at Portland, Oregon, July 8th to 12th, inclusive, was a very successful session for one held on the Pacific Coast which means too long a trip for most of the members of the Association who live east of the Mississippi. However, the registration was more than three thousand, of whom forty was the representation from Indiana. The facilities were all that could be desired and there was enough of interest in the various programs to suit all those in attendance. The addresses, papers and discussions were unusual in excellence; the exhibits, both technical and scientific, attracted the usual number of students and observers; and in the matter of entertainment nothing was left undone by the Portland medical profession. There were tours to the mountain peaks in the vicinity, drives over beautiful highways to scenic points along the Columbia and the beaches, and an abundance of dinners for officers, members of the House of Delegates, and others in attendance upon the session. In fact the hospitality was exceptional, and generous in abundance and cordiality.

The business of the Association was conducted by the House of Delegates, which had many problems of scientific and practical interest to discuss. Some of the important actions taken are as follows:

Providing for the appointment of a committee by the Board of Trustees to direct the preparation and publication of a comprehensive history of the American Medical Association.

The adoption of a resolution providing that the Judicial Council of the Association be asked to present to the House of Delegates at the annual session in 1930 a comprehensive statement for the guidance of the American Medical Association concerning the practice of medicine by corporations, by clinics, by philanthropic organizations, by industrial organizations, by demonstration, and by similar organizations, and concerning the relationship of physicians thereto.

The adoption of the report of the special com-

mittee appointed to study the need for the establishment of a home for needy physicians. The report of the committee as adopted advised against the establishment by the Association of a home or homes for indigent physicians and expressed the opinion that it is not nor should it be a function of the American Medical Association, at this time, to undertake the care of indigent physicians in any way.

The adoption of a resolution providing that when publishers of classified telephone directories impose a charge for listing the names of ethical physicians in such directories, component county medical societies of the American Medical Association be advised to discontinue such listings in the classified directories.

The adoption of a resolution providing that the American Medical Association shall endorse the medical work of the Department of Commerce, its methods of physical examination and its method of selection of medical examiners, and urges that the same high standard be continued, and offers the support of the American Medical Association in furthering the specialty of aviation medicine.

The adoption of a resolution providing for the appointment by the Board of Trustees of a committee to study and report on the menaces to health and to life by carbon monoxide gas as a constituent of illuminating gas, and as a by-product of the combustion of gasoline in automobiles, and for study of the dangers of gases used for electric refrigeration, and on steps necessary to be taken for the protection of the public.

The adoption of a resolution requesting the Council on Medical Education to investigate the present teaching of obstetrics in this country and make such recommendations for increasing the clinical teaching hours as a result of its investigation may warrant.

The adoption of an amendment to the by-laws which provides that two-thirds rather than three-fourths vote of the House of Delegates be permitted in order to amend the by-laws of the Association.

The adoption of a resolution asking for a discontinuation of hospital advertising in the lay press, and that the rating of hospitals be effected according to the advertising published. An amendment also was adopted whereby any physician observing unethical advertisements of hospitals is requested to send such advertisements to the Council on Medical Education and Hospitals for its information and use in the rating of hospitals.

The adoption of a report by the Board of Trustees to the effect that any section secretary may be reimbursed for actual expenses involved in the preparation of the program and the presentation of same at the annual session. This is in lieu of a resolution to the effect that a definite sum shall be paid as an honorarium to the secretaries of the various sections, and the Board of

Trustees thought that it would establish a bad precedent to provide definite honorariums that would be too large for any but the larger sections.

The adoption of a recommendation from the Board of Trustees that no supplement to the *Journal of the A. M. A.* be printed for the purpose of more generally distributing the papers and discussions of the section on ophthalmology and otolaryngology.

The approval of the action of the Board of Trustees in preparing a digest on physical therapy, apropos of a resolution to that effect, which digest will be ready at an early date for distribution to the members of the medical profession.

The adoption of a recommendation from the Board of Trustees that the Association must not pay the expenses of delegates for transportation, housing and maintenance during attendance at any annual session, in answer to a question raised by a resolution to that effect offered for adoption and defeated.

The resolution pertaining to assistance of small hospitals in improving their systems of records and services to the public, was referred to the Council on Medical Education and Hospitals, which reported that such work is now being carried on and that the Council stands ready to give all possible assistance to small hospitals in solving their problems.

The House of Delegates through motion duly adopted declined to take any official action upon the question of opposing the practice of the American Red Cross in sending Red Cross nurses to nurse patients under the care of cultists, and went on record as disapproving any change of policy of the American Red Cross whereby the nurses of that organization are available for service to patients under the care of cultists.

Concerning the need for a new building for housing the activities of the Association, the House of Delegates expressed its conviction that it is desirable for the Association to have a building that will be visible evidence of the dignity and importance and power of the Association, but it was left to the Board of Trustees to perfect plans for providing the building. The report as adopted also expressed the opinion that the subscription price of *The Journal* is now relatively greatly below the price of other journals that approximate it in extent and quality, and suggests that the Board of Trustees should consider the question of increasing the subscription price of *The Journal*. A further recommendation of the committee, duly adopted, was to the effect that it would be appropriate for the Board of Trustees in a building program to solicit memorial contributions, both large and small, from members of the Association. The committee expressed its conviction that as the Association shows increased evidence of strength and permanence it gradually will become the recipient of an increasing number of memorial contributions.

In the further consideration of increasing the cost of *The Journal* an amendment to the By-laws was adopted whereby the Board of Trustees is authorized to increase the subscription price of *The Journal* to a sum not in excess of eight dollars per year.

A resolution was adopted whereby medical schools are asked to arrange for and to encourage acceptance of a period of practical experience by students with practitioners of high standing, preferably in the country.

The adoption of a resolution which declares that it is the sense of the American Medical Association that the determination of measures necessary for insuring the safety of milk for human consumption is a duty and function of the medical profession through the duly constituted public health officials of this country.

A resolution was adopted providing for the appointment by the Board of Trustees of a special permanent committee to be known as the committee on military affairs and national defense to which shall be referred matters pertaining to national defense and military preparedness. A resolution also was adopted providing that the American Medical Association, through its House of Delegates, goes on record as heartily approving the national defense act of 1920.

The adoption of a resolution providing that the House of Delegates record its opposition to the passage of a bill providing for increased tariff upon surgical instruments, x-ray equipment, vacuum tubes, valve tubes and scientific glassware.

A resolution was adopted which amends the present standards of physical fitness of automobile operators, adopted by the Association, and providing standards of mental and moral fitness, recommended for adoption by the several states as a condition for issuing licenses to operate motor vehicles.

A resolution was adopted whereby the Association expresses its continued interest in the correction of the abuse of medical expert opinion evidence, and pledges its support of the passage of appropriate legislation in bringing about changes in court procedure with reference to such evidence. The Association also approves the principle of securing, in the case of all capital charges and in the case of as many other criminal charges as the psychiatric facilities of the state will permit, an impartial and routine mental examination of the defendant in advance of the trial, as a means of obviating the contentious introduction of partisan testimony, and it approves the principle of removing as far as possible the question of sanity from the trial itself, reserving the employment of psychiatric data for the post-trial inquiry to determine what treatment is appropriate for the convicted person.

A resolution was adopted providing that treatment for hyper-trichosis by the tricho system, and

by allied systems employing radiation, be condemned as highly dangerous to the patient, and that all cases presenting the effects of this type of treatment and seen by members of the medical profession be reported to the Bureau of Investigation of the American Medical Association.

The Judicial Council recommended and the House of Delegates adopted an amendment to the Principles of Medical Ethics covering the question of division of fees, and the amendment (Section III, Article VI, Chapter 2) of the Principles of Medical Ethics now reads as follows: "When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called or under any guise or pretext whatsoever."

The election of officers of the American Medical Association resulted as follows:

President-elect, William Gerry Morgan, Washington, D. C.

Vice-president, Ernst A. Sommer, Portland, Oregon.

Secretary, Olin West, Chicago.

Treasurer, Austin A. Hayden, Chicago.

Speaker of the House of Delegates, F. C. Warnshuis, Grand Rapids, Michigan.

Vice-speaker of the House of Delegates, Albert E. Bulson, Fort Wayne, Indiana.

Members of the Board of Trustees, D. Chester Brown, Danbury, Connecticut (re-elected); Allen H. Bunce, Atlanta, Georgia, to succeed E. H. Cary, Dallas, Texas.

The president, Dr. M. L. Harris, made the following nominations for standing committees:

Judicial Council, James B. Herrick, Chicago.

Council on Medical Education and Hospitals, M. W. Ireland, Surgeon General, U. S. Army; James S. McLester, Birmingham, Alabama.

Council on Scientific Assembly, Lewis H. McKinnie, Colorado Springs, Colorado.

Detroit, Michigan, was selected as the place for holding the 1930 session of the American Medical Association.

In the words of *The Journal of the A. M. A.* for July 27th, "Again the annual session of the American Medical Association demonstrated the unquestionable right to recognition as the premier scientific session held in our country."

FEE SPLITTING

Wisconsin has a state law prohibiting fee splitting among physicians and surgeons. A physician calling himself "A Country Surgeon," in an open letter printed in the *Wisconsin State Medical Journal* for June, 1929, under the title, "Confessions of a Country Fee Splitter," urges his state medical association to go on record as favoring the repeal of the law. He then makes a very lame defense of fee splitting on the ground that as

long as the patient is not concerned about the matter then no one else should offer objections.

We are amused in noting the mental contortions of men who attempt to whitewash questionable practices by arguments that are not sound or consistent. Lay persons sometimes do not see the dangers of fee splitting until the possibilities for great harm and injustice to all concerned are pointed out to them, and then they are as much opposed to the practice as anyone else. Medical services are not on a par with the selling of merchandise but represent individual effort for which adequate compensation should be paid to the individual, and each one rendering services should occupy an independent position in the matter. In the final analysis the fee-dividing surgeon is buying his business, and he pays for it what he thinks he has to pay for it in order to get it, sometimes the payment being very large as the direct result of competition. In this bargaining it often isn't a question of the quality of the service, but on the part of the surgeon, "What will I have to pay to get the business?" and, with the referring physician, "What am I going to get out of it?"

To our notion the whole question of fee splitting is one tinctured with commercialism, and a total disregard of the cardinal principles involved in a transaction that should stand the test of fairness to all concerned. The referring physician should collect his own fee, which latter in every instance should be based upon the value of the services rendered, and the surgeon should aid the referring physician in the collection of those fees by creating a sentiment among lay people which will place the services of the general practitioner on a higher plane and the compensation based upon the skill and judgment exercised. Very naturally the referring physician must possess a conscience that is working overtime if he resists the temptation to accept a fat fee from a surgeon as a division of the compensation secured from some patient requiring a major operation. That he does not resist the temptation is very evident, if we can judge by incidents that are a matter of record, as well as incidents that occasion gossip in connection with the fee-dividing question.

At the Portland session of the American Medical Association fee dividing was defined by the Judicial Council as follows:

"When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, it is unethical to give or to receive a commission by whatever term it may be called or under any guise or pretext whatsoever."

Neither the American College of Surgeons nor the American Medical Association have been able to check fee dividing, even though both organizations have prescribed penalties for those found guilty. In fact we have every reason to believe that a fairly large percentage of the Fellows of

the American College of Surgeons are dividing fees at the present time, under one guise or another, and we are informed that some of the Fellows have been bold enough to inform "the powers that be" in the American College of Surgeons that they are dividing fees and that they propose to do so even if expelled from the ranks of the elect, and we do not believe that a single one of the confessors have been disciplined. In short, it is our candid opinion that the American College of Surgeons, professing very high and commendable ideals, comes far short of living up to those ideals, and this pertains to its rating of hospitals as well as rating of surgeons. Such hypocritical conduct is condemned bitterly by a class of surgeons and specialists whose conduct requires no oath of allegiance in order to make them behave properly, and yet the majority of them do not make their protests heard in an effective way, and the American College of Surgeons continues to "live a double life." Perhaps what we have to say should be considered treason, and if so, let it stand that way. We never did and we never will divide fees, either in or out of the American College of Surgeons, and while opposed to the practice as essentially dishonest as well as unethical, we feel that in the main what the referring physician secures from the fee-dividing surgeons to whom he refers his patients is his due. However, we believe that the referring physician should make his own charges and collect his own fees from the patients, independently of the surgeon. On the other hand, it is the duty of the surgeon to help the referring physician to secure recognition of the ability and judgment displayed in any given case, and to receive the compensation that such judgment and ability should have. Such a policy if followed may cut down the amount of work done by some of the less qualified surgeons who in reality owe their volume of business to the amount of commissions paid directly or indirectly for it, and the duplicity with which some general physicians will swallow the bait that is offered. However, it would redound to the credit of the medical profession and would be very much to the best interests of the public.

WHAT ARE THEY GOING TO DO ABOUT IT?

What are the people of Indiana going to do to protect their children from diphtheria this coming fall? When school opens each September, parents send their children into a veritable hotbed of infection. Immediately with the opening of the schools each year, the incidence of diphtheria begins to mount, reaching its peak in October or November. This condition exists every year and

will occur again this year. Children can be protected against the possibility of contracting diphtheria by means of toxin-antitoxin treatments given right now. It takes a child from one to two months to develop immunity following treatment. Therefore, to protect a child against diphtheria this fall he should be given the toxin-antitoxin treatments as soon as possible. Any physician can give the treatments and they are relatively inexpensive.

Are the parents in Indiana going to take advantage of what science has to offer in the way of protection against one of the diseases causing the greatest death rates among children or are they going to sit placidly by and in cold blood send their children into school unprotected, to take their chances of getting or missing diphtheria, on the principle of "The race is to the swift and the Devil take the hindermost"?

We do not believe that parents feel this way about it. Most parents have not given the matter of health and disease in school children careful consideration, but you must remember that a child is just as sick if he gets the disease, and if he dies he is just as dead as if his parents did not care instead of just did not think.

There will be between now and one year from today about 200 funerals due to diphtheria, and at the same time there will be about 1,000 more children more or less permanently crippled as a result of diphtheria infection in Indiana. Every case of diphtheria and every death from diphtheria is directly chargeable to the parents of that child. Diphtheria is preventable. It is within the power of every parent to cause diphtheria to cease to exist as far as their children are concerned. The time to protect your children is right now, if over six months of age. The place is your family doctor's office. The reward is permanent assurance that your child will not contract diphtheria. What are the parents of Indiana going to do about it?—*Bulletin of the Indiana State Board of Health* for July, 1929.

To this we wish to add, "What are the *physicians* going to do about it?" Diphtheria immunization never will be popular until medical men individually and collectively succeed in getting the people to ask for it. From all that we can learn, there isn't one physician out of ten in the state of Indiana who says anything to his patrons concerning diphtheria prevention. We note that some of the school physicians talk about the matter, but many of them talk about it in a half-hearted way while a few are actually remiss in duty and do not mention the subject at all. Of course, physicians are hurting themselves financially when they do away with diphtheria, but it is a moral if not a legal duty to prevent sickness wherever and whenever possible, and it is an established truth that diphtheria immunization if universally carried out would do away with diphtheria entirely.

EDITORIAL NOTES

DEAR DOCTOR:

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

THE time: Wednesday, Thursday and Friday, September 25, 26 and 27.

THE place: Evansville, Indiana.

THE event: The annual session of the Indiana State Medical Association.

Do not neglect to take your membership card with you to Evansville as it will be required when registering.

THIS number contains the complete, official program of the Evansville session. Read it carefully and go to Evansville prepared to take part in the scientific discussions.

AGAIN we are publishing a list of the presidents of the Indiana State Medical Association from the founding of the Association up to and including the present time.

THIS year we revert to section meetings at the Evansville session, and we believe it is wise to go back to the old plan. There will be two half days devoted to general sessions and two half days to the meetings of sections.

As an example of newspaper distortion we read in a western newspaper that a child caught a button hook in her tonsils and completely removed them in that way. The button hook must be one instrument that throat surgeons have overlooked.

DON'T fail to read the introduction to the Medico-Legal department which makes its initial bow in this number of THE JOURNAL. The members are asked to make use of the department through inquiries that will be answered in THE JOURNAL.

THE physicians of Indiana are being circularized by a Kansas City physician, who apparently follows drugless therapy, advising them that he can cure syphilis by a new drugless method, and desires to teach the system at so much per. We hope that no physician will be silly enough to bite at the bait thrown out.

IN this number of THE JOURNAL we are starting a new department to be known as the Medico-Legal department, in charge of Albert Stump, attorney for the Indiana State Medical Association. It will discuss the problems of the physician, and the plan and purposes are outlined in Mr. Stump's introductory statement.

THE river excursion to be given on the first night of the Evansville session promises to be an unique and enjoyable form of entertainment. We have recollections of such entertainment at previous sessions held in Evansville and therefore can look forward to such entertainment this year with a great deal of anticipation.

A PACIFIC coast bridegroom lost his life from infection caused by a pin prick received while pinning up his bride's dress. That should be a warning to all brides and bridegrooms. But in this advanced age why was any pinning necessary anyway, for they tell us that most women get into a dress as they would get into a bag, and buttons, hooks and eyes, and pins are superfluous.

ONE of our old medical friends, when asked his age, replied that he was not yet old enough to give away dimes nor to start a medical history of Indiana. He also slyly advanced the opinion that he had not reached the age of discretion, though we take it for granted that despite the fact that we know he is past the biblical allotment of three score and ten, he still is a useful member of society.

A MICHIGAN physician writes us that he is pleased to know that we are "noticed and endorsed by the high brow lay publications," and proceeds to inform us that an entire editorial in THE JOURNAL relating to the unnecessary extraction of teeth has been published in the *Literary Digest*. Well, if we are dispensing the right kind of gospel we are very glad to have it noticed and accepted by any of the lay publications.

THE Indianapolis Medical Society is sponsoring a post-graduate course in some of the fundamentals of medicine. It is believed that the physician who has been out in general practice or in a specialty for a number of years feels the need of refreshing his memory concerning some of the things which he has not studied since leaving medical school. The first lecture will be given at the Atheneum at 8:15 p. m. on October 8th. All reputable physicians, interns and medical students are invited to hear these lectures.

It is reported that Henry Ford found a check for \$80,000 in the pocket of one of his discarded suits and confessed that he had forgotten all about the check. What a comfortable feeling it must be to be able to mislay a check for a large amount

and forget all about it. If we mislaid a check for eight dollars we couldn't forget it, and would have sleepless nights until the check was found! But then physicians are not supposed to be able to juggle \$80,000 checks.

THIS year Indiana has had a number of deaths from tetanus. Some of them could have been prevented by the prompt use of anti-tetanic serum by the attending physician, while other cases were seen first by a physician when it was too late to make any treatment effective. The point to bear in mind is that any person receiving a wound the manner of acquiring and nature of which is suspicious should have the benefit of the doubt and be given anti-tetanic serum.

THE medical defense feature of our Association still maintains a fine record of achievement. Not a single member of the Indiana State Medical Association entitled to medico-legal defense on the part of the Association has been denied service, and the Association has been able to defend successfully a large number of threatened or actual malpractice suits. The expense still is confined to seventy-five cents per annum for each member of the Association.

How many Indiana physicians have recommended for their patients (1) typhoid vaccination, (2) diphtheria immunization, (3) scarlet fever immunization, (4) periodic health examination? Don't hurt your throats by screaming "I". A fine bunch of physicians we are to let others do the talking for us, and that is exactly what is being done by welfare organizations, insurance companies, and industrial concerns, all of which appreciate the value of disease prevention.

WITHOUT being noticed during his entry, a boa constrictor suddenly presented himself in the ward of one of the South American hospitals. Result: A number of incurable cripples suddenly found themselves able to walk and even run, and after the scare was over it was found that they had fully recovered. Too bad that boa constrictors cannot be used in some of our American hospitals to cure some of our hysterics. In reality, some of our psychic cases would do far better if they had less sympathy.

WE know a physician, somewhere between sixty and seventy years of age and still reasonably active, who has retired from the practice of medicine and says he is going to loaf. To our notion when any business or professional man retires he is as good as dead unless he finds a new occupation for his time and energy. Every man is happier and lives longer if he works at something as long as he is able to work. To "die in the harness" while still active enough to be in harness is better than to die of dry rot!

THE Committee on Arrangements of the Evansville session has asked us to emphasize the following:

Hotel reservations may be secured through the local committee, of which Bruce H. Beeler, Evansville, is chairman. Those who desire to enter the golf tournament at the municipal course should get in touch with Dr. Robert R. Acre, 200 American Trust Building, Evansville. Those who expect to attend the service men's luncheon or any of the class reunion luncheons are asked to communicate with Dr. Clarence S. Baker, Evansville, chairman.

The Indianapolis News suggests that the editor of THE JOURNAL should refrain from disposing of his golf clubs and let the future work out a solution for temporary ills. No doubt the suggestion is based on the knowledge that the average man who takes up golf gets disgusted at the poor showing made and smashes his clubs but without curing him of the disease golf-itis and he tempts Fate again by going out and buying another set of clubs. The suggestion certainly offers possibilities of economy to the extent of the price of a set of clubs, so perhaps we will keep our clubs if for nothing more than ornamental representation of thwarted hopes!

ONE of the members of the Indiana State Medical Association writes us that he has been "stung" by a collection agency having offices outside of the state. To be perfectly frank we have little sympathy for him. Out of those collection agencies that make a specialty of collecting for physicians we don't believe there is one out of fifty that is worthy of confidence. Place your collections in the hands of someone right at home whose responsibility and trustworthiness you know something about. Furthermore, when you sign any contract for the collection of your accounts, be sure to read the contract carefully in order to avoid being caught with technicalities that will work to your disadvantage.

A CORRESPONDENT says, "The osteopaths and chiropractors are fading from the picture, so why shouldn't regular medicine come into its own?" To which we answer: Throughout all the history of medicine the pseudo-medical cults have thrived for a while and then died, but whenever one dies another one, even more fantastic and inconsistent in its teachings, arises to fill the vacancy. To the end of time we shall have pretenders of the ignorant and untrained type promising relief to the sick and suffering, so when we get through fighting one we shall have to fight another. The suppression of cults will be easier if we do a little more publicity work than we have in the past, in the hope of educating the public to the dangers of pretense.

THE Section on Nervous and Mental Diseases of the A. M. A., Portland session, took a rap at the educators concerning the tendency to crowd students in our schools and colleges with the inevitable result of breaking down the nervous system in all those who aspire to keep up in their classes. The trouble with the average educator is that he does not realize just how much work he is saddling upon his students, and if he will take just a small amount of time to analyze the subject he will realize that only those in the best physical condition and possessing a normal nervous system can keep up in the average curricula. It is all right to modify systems of education, but something should be done to limit the incessant and nerve-racking grind.

IN commenting upon the government's suppression of the sale of the book entitled "Uncle Sham", a silly criticism of habits and practices in the United States, the *Chicago Tribune* offers this caustic opinion: "American censorship grows and increases the extent of its domain. The Federal government is in the kitchen, the cellar and the library. It shoots into the automobile and reaches into the bedroom. It is offensive to the stranger at its gate and to the citizen in his home. It checks people up on a daily report card, orders their habits, regulates amusements, interferes with their opinions, and supervises their reading. The United States is becoming the largest combination of orphan asylum and institute for feeble-minded the world has ever known."

SOME telephone companies are becoming so grasping that they get out classified directories the listings in which are paid for at a handsome rate. In some localities the physicians have taken a concerted action in opposition to the charges made for classified listing of physicians, and quite recently the A. M. A. has gone on record as opposing the enterprise in view of its unfairness. If the telephone company publishes a classified directory it is supposed that the directory will be trustworthy, and comprehensive, whereas if it is confined to only those who pay for the privilege of being in the directory then it serves no useful purpose for the public. The classified directory should be a part of the service rendered by the telephone company and not made the object of a species of graft upon others.

THE ineffective and inadequate sanitation of swimming pools is a pet peeve of ours, and for the reason that so many cases of infection that reasonably can be traced to swimming pools have come to our attention within the past few years. No bathing pool can be considered even reasonably safe without control of the bather and adequate replacement and proper disinfection of the water. Those using the pools should scrub themselves thoroughly with soap and water before

entering the pool, and they also should be given a careful physical inspection to guard against permitting anyone from entering the pool who may be a carrier of disease. The standards for replacement and disinfection of water as fixed by sanitary authorities should be followed. Seldom are these requirements carried out.

THE average member of the Indiana State Medical Association does not know how much work is being done in his behalf by officers and committees of the Association. Therefore, we urge every member to read carefully the committee reports published in this number of *THE JOURNAL*, and especially the report of the secretary and the executive committee. To our notion the Association has a splendid record for achievement. When one knows about the enormous amount of work done by the Bureau of Publicity in particular, the executive committee, and the Association office itself with the executive secretary in command, to say nothing of the work done by all of the officers and committees, we feel that our Association should be proud of its record.

A CHICAGO manufacturer says, "If you can prove to us that advertising in your journal will increase our business, we will gladly give you a contract." Of course we replied to the effect that our readers do read the advertisements, and they do patronize *THE JOURNAL*'s advertisers. We hope that Indiana physicians at all times will help us to make that statement good! However, we are firm believers in the advertising agent's slogan, "It pays to advertise." But quality should be the best advertisement for anyone who hopes to receive continued support, and, therefore, inasmuch as we accept only advertising of quality, the fact that an advertiser is permitted to have his announcement in *THE JOURNAL* is a recommendation in itself, and along with the announcement of what he has to sell means increased business.

THE dieting fad among women is creating a large number of neurasthenics and invalids. Many of those women and girls who are following some fool diet that is injurious to their systems also are trying to get thin by excessive smoking, which they say creates a dislike for food. Even the widely published statement of Ziegfeld, who is said to have declared that in the Follies he wants plump girls who are better looking and healthier, has not lessened the desire on the part of a lot of foolish females to become thin and willowly even though it makes invalids of them or kills them. One popular young woman, much in the limelight and noted for her excellent figure, publicly announced that she would rather be plump and healthy than thin and a neurasthenic. It is unfortunate that more females do not feel that same way.

WE desire to repeat what was said in *THE JOURNAL* in September of last year, which was as follows:

"The members of the Indiana State Medical Association should take advantage of our Committee on Civic and Industrial Relations in controversies over the settlement of bills for professional services rendered in industrial cases. The committee acts as an arbitration committee and has been the means of establishing better relationship between physicians and employers of labor and their representatives, the insurance carriers. If you are having trouble in securing just and adequate settlement of your claims for services in industrial work, place the facts before the committee on Industrial and Civic Relations, of which Dr. Frank S. Crockett, of Lafayette, is chairman."

MUCH has been said in lay publications concerning the dangers of mechanical refrigeration and fatal accidents resulting from breathing escaping gas from refrigerating systems. This disquieting information has been used by manufacturers to their advantage when such concerns do not employ some of the chemicals supposedly responsible for the bad results. Especial complaint has been raised concerning the danger from methyl-chloride systems. However, the United States Public Health Bulletin, after their investigation of the subject, says "It should be recognized that the number of serious accidents from household refrigerating systems has been small in comparison with the number of such systems in use, and improvements may be expected which will much reduce the slight hazard that does exist."

THAT the diet of the average individual should be reconstructed was an opinion expressed at the Portland session of the A. M. A. by a prominent member of the Section on Nervous and Mental Diseases, who said that hustle and bad food are making a nation of neurotics. He also said that vegetables, eggs, fruit and milk have been found to be great curatives in many neurotic disturbances.

We might add that upon the shoulders of the medical man falls the duty of educating the public concerning the need of well-balanced rations and appropriate rest and recreation. The Bureau of Publicity of the Indiana State Medical Association is doing a commendable work in this direction, and deserves not only the support of the medical profession but the advice offered should be heeded by the public.

THE daily press carries the announcement that the official of Bangkok, Siam, whose post corresponds to that of commissioner of public morals, has issued an order that hereafter no woman must expose her legs above the ankles unless she possesses shapely legs. Accordingly the Siamese

flapper must have a special permit to wear short skirts. We wonder if they have a crowd of applicants for the position of official examiner of female legs in order to determine those that are shapely enough to justify permission to wear short skirts. Furthermore, just what kind of standard will be established in determining what constitutes a shapely leg? Perhaps Sir Arbuthnot Lane, who is reported to have said that American girls have the most shapely legs of any, could get a very profitable job in Siam judging the shapeliness of the legs of Siamese flappers.

No doubt hospital standardization in the main is an urge for better hospitals and more efficient service to the sick. However, hospital standardization is a farce if we are asked to accept every standardized hospital as living up to the rules that have been laid down and under which the hospital is supposed to have been accepted. The truth of the matter is that hospital standardization as put into effect by the American College of Surgeons too often has been tinctured with favoritism rather than proficiency and ethical standing as a requirement for acceptance, as it also has been represented by the rankest kind of cowardice on the part of officials of the American College of Surgeons when charges against approved hospitals have been either ignored or a white-washing verdict rendered. Let us hope that the American Medical Association will turn over a new page and put into effect a hospital standardization that really means something and is enforced without fear or favor.

A FEW weeks ago the editor was notified that he had been selected from among a number of noted men of Indiana to represent the National Economic League. He didn't bite, and in fact didn't even acknowledge the notification that such a high honor had been bestowed upon him. Now comes a notification from the League to the effect that he really has been elected a member of the national council of the Economic League. In the announcement is an implication that the membership dues of five dollars will be appreciated. Really, it is wonderful how often honors are heaped upon us in the way of elections to memberships in a varied assortment of societies at so much per in membership dues which in the ultimate analysis we always have thought was the principal reason for the election. Perhaps we are mistaken, but anyway, we cannot afford all these honors for we are obliged to save our pennies for food, raiment, the roof over our heads, and a very little for fishing tackle and angleworms.

FROM the fact that the much-advertised "eighteen-day diet" requires such a generous portion of oranges and grape-fruit, it has been charged that the growers of citrus fruit are responsible for the fad which has spread like a prairie fire all over

the country and been so eagerly grasped by a lot of foolish women and girls who think that they will improve their looks by losing weight. In reality the eighteen-day diet is dangerous, as it does not provide sufficient nourishment, and, anyway, too rapid loss of weight is deleterious and should be discouraged. Physicians have advised their patients wisely that the best way to cut off superfluous flesh is to quit eating so much but maintain a well-balanced diet in the diminished quantity taken. The latest fad is to attempt to take off weight by diminishing the hours of sleep in addition to following "the eighteen-day diet." That is another dangerous practice and certain to produce a lot of neurotics and perhaps invalids. When you begin tampering with nature's requirements for health, you are going to pay a severe penalty.

RECENTLY the Associated Press carried the announcement that a physician, sixty-three years of age, and apparently in good health, dropped dead while playing tennis. We have noted that there are many physicians who engage in strenuous games like handball and tennis, and we always have believed that the violent exertion required for such games is dangerous for men past middle age. Exercise is valuable, but it should be taken with some discretion and judgment, especially by those of middle age or over, as also by those who are adopting it following long-continued sedentary habits. Even the young office man who gets little or no regular exercise can do himself an infinite amount of harm by starting out with vigorous exercise when he takes his annual vacation. Sometimes he seems to think that he must hike, swim, play tennis and other games requiring vigorous exercise, all because it is vacation time and a period devoted to such things, but not infrequently he overdoes the matter to his detriment. Not a few physicians are guilty of this error, and it would be well for them to make up their minds to exercise in moderation, and at sixty to cut out tennis and other strenuous athletics.

FOR some time the members of the medical profession have been receiving letters from the Keeley Institute, which has been engaged in treating alcoholic beverage addicts for fifty years or more, soliciting alcoholic cases that can not be handled satisfactorily by the ordinary physician. In a letter just received occurs this significant statement: "The problem of dealing with alcoholics does not seem to abate to any extent. It is our observation that the cases are more pitiable today than they ever have been in the history of our business. Cases which come to us come from a different class than ever before. The class which represents the greatest increase is the active business man. In former years these men took an occasional drink, today they are confronted with

the bottle of liquor and are apt to consume it at one sitting. This is far more liquor than they ever intended to use at one time. The result is that these men are rapidly becoming inebriates. Undoubtedly you have some of them in your practice. They are difficult to control in private practice because they are not dependent on anyone as they have the money to get what they want."

SUBSTANDARD ether is reported as being on the market frequently, and sometimes under the label of supposedly very responsible manufacturers. It is said that the ether supply is watched closely by government chemists, and it is claimed by them that the technique of the manufacture and packing of ether has not yet been perfected to a point where anyone can be absolutely sure that the ether meeting every requirement at the time of packaging will not upon standing deteriorate to a point where it will not meet the standard of the United States Pharmacopœia. Accordingly, it has been necessary to condemn considerable ether on the ground that deteriorated ether is unsafe. However, the regulatory officials say that it is not necessary for them to prove that such ether may be harmful to the patient before they can remove it from the market.

To us it seems of vital importance that hospitals and individuals using ether should make sure that they are using *fresh* preparations from the most reputable manufacturers, and if there is any question about the ether being substandard then the ether should be submitted for examination before being used. If deteriorated ether is unsafe, then some measure should be adopted whereby hospitals and individuals may be protected.

IN a paper presented before the Illinois State Medical Society, Dr. Emmett Keating, of Chicago, makes a good point when he urges every physician to become a competent general physician, and in order to do this it is necessary to be able to take a careful and complete history, to make a complete physical examination, and, finally, to make a correct diagnosis. If he is not competent to do these things he should study carefully each patient coming to the office, whether such patient is to pay a large or small fee, and it will not be very long until the physician finds himself in possession of a knowledge that will command the respect of the specialist. The public is quick to learn that it is not necessary to go into foreign fields to find someone who is entirely capable of giving trustworthy counsel, advice and medical care. The public will find that the family doctor knows his work so well that it is not necessary to seek outside help, and that if something arises that the family physician feels needs the attention of the specialist, he will send the patient very promptly to someone who has prepared himself properly for that particular kind of work. In fact it is the well-trained, ob-

servant, and conscientious physician who recognizes his limitations and seeks assistance when help is needed.

WE note that there has been a marked increase in applications for admission to medical schools during the past three years. There also has been a stiffening of requirements, resulting in the rejection of many applicants. We sometimes wonder why young men who expect to make a living from the practice of medicine should be interested in the long and expensive grind necessary to become a licensed practitioner of medicine, especially when the prospects for the future of earning a decent living seem so discouraging in view of the growing tendency toward state medicine or medicine of the chain-store variety under lay control. However, we are pleased to note that the feeling among educators is that what this country needs is not more but better doctors, and therefore efforts are being put forth to improve the quality. Our criticism of the average curriculum is that there is a tendency to lay too much stress upon the specialties and not enough upon the cardinal branches of medicine and surgery. Today's medical student gets too little training in obstetrics, materia medica and therapeutics, and physical diagnosis in the average medical school. He gets too much special education and training that he cannot use intelligently. In short, we need more well-trained, good general practitioners of medicine and fewer specialists, particularly of the "half-baked" variety.

ON several occasions we have commented on the increase of self-prescribing among the American people. This practice is encouraged by the members of the medical profession who altogether too often are glib about telling patients what is being prescribed for them and in what doses. In consequence the patient ever afterwards prescribes for himself when he thinks that he has the same signs or symptoms that he possessed when the doctor offered the prescription originally. Not only do the patients prescribe for themselves, but they offer their advice to friends and acquaintances who are very apt to accept it. However, all the blame cannot be placed upon members of the medical profession, for the druggists are practicing medicine just about as much as does the average physician. If you don't believe this, go into some drug store where you are not known and complain about a little rheumatism and see how quickly the druggist will offer you aspirin, or if you are sneezing he probably will tell you that you are suffering from a cold in the head or hay fever, and he immediately offers you some form of ephedrine, and we know of one druggist who even attempted to give vaccine injections for hay fever. All of which reminds us that the physician who dispenses his own drugs has a good argument, and we do not feel like criticizing him to the

slightest extent for "doling out pills and potions."

VARIOUS health and insurance organizations are attempting to secure the services of physicians on a salary basis and then selling those services to the public at a profit to the enterprise. Thus the Health and Hospital Service, Inc., of Chicago, offers four thousand dollars per year to physicians who will serve the corporation and, in turn, the corporation advertises in the newspapers and elsewhere that it will provide medical and hospital services for a definite sum annually. No doubt a certain number of physicians will be willing to "sell their souls for a mess of pottage," but the serious aspects of the movement, which threatens to place a majority of the physicians of the country on the basis of a salaried clerk, is worth something more than a passing thought. What is going to become of the art and science of the practice of medicine when it depends upon the vagaries of commercial institutions, or political control in case state medicine becomes a reality? A few have recognized what we predicted a short time ago, that a majority of the physicians of the United States will be occupying small salaried positions in the course of the next ten years unless the medical profession as a profession wakes up to the dangers that threaten, and indications strongly point to the correctness of the prediction that has been made. Many physicians do not take time to think of these threatening disasters, yet the time is coming when they will be forced to take action and probably when it will be too late.

THE Riley Memorial Hospital in Indianapolis is one of the noted children's hospitals of the United States. It is exceptionally equipped for the most up-to-date service. Its popularity is attested by the fact that it now has a waiting list of 175, though the new Kiwanis wing which it is hoped will be dedicated some time in January, will afford accommodations for fifty more. Every Indiana physician who is interested in the care of crippled children ought to visit the Riley Hospital and view the work that is being done there. For that matter, we might add that every Indiana physician will profit by visits to the other two University hospitals, the Coleman, for lying-in women, and the Long, devoted to general and surgical diseases. In fact, we doubt if there are many Indiana physicians who really know what the Indiana University School of Medicine and the hospitals connected therewith are doing to educate in the most approved way the students who are to be the future practitioners of medicine, nor do many know anything about the research work that is being accomplished in the hospitals that have been mentioned. The modesty of the officials of the hospitals and the medical department of the University prevents us from getting all of the information that we think should

be given to the physicians of Indiana through the medium of *THE JOURNAL*, in spite of all of our efforts to obtain legitimate information for publication, but we hope that in the near future we shall be able to convince "the powers that be" that a record of what is being accomplished is not only due the medical profession of the state but will add to the prestige and the value of the work that is being accomplished by our University.

THERE are physicians who are faddists, and they proselyte among lay persons in an endeavor to get converts to their cause. Sometimes it is food, other times exercise, and still other times various habits of life. Dr. Morris Fishbein, editor of the *Journal of the A. M. A.*, in addressing lay audiences and particularly at Portland during the session of the A. M. A., makes the faddist a target for some rather pungent remarks. Concerning the food faddists he says, "Fanatics who subsist largely on hay, grain and oats are not all either thoroughbreds or jackasses. Vegetarians attach undue harm to the eating of meat, and base their conclusions on the fact that apes live on nuts, fruits and cereals. The monkeys have, however, another habit not quite so appealing to *homo sapiens*. The vegetarians say that animals living on vegetable diet are strong and tractable, while meat eating animals are ferocious." Dr. Fishbein says that the most ferocious man he ever saw was a vegetarian who discovered that he had eaten a caterpillar with his lettuce! He says that the campaign against white bread is linked up with tremendous commercial interests. Concerning the yeast fad, he said, "Yeast will not grow hair on bald heads, grow new teeth, remove pimples, blackheads or similar embellishments from a dirty face, nor permit octogenarians to put their young ideas into practical effect. Neither is bran a panacea for all intestinal disorders." In fact Dr. Fishbein very properly pointed out that most of the propaganda concerning food is all bunk, and that a rational diet consists of eating a little of everything that is of good quality and digestible, but not gorging. Most of the food faddists and the dietists are ill from taking their own prescriptions!

PUBLIC health officials in Washington are advocating reform in men's dress that will in a measure keep abreast of women in plain sensibility. The assistant to the surgeon general says that men should follow the example set by women. The clothing at present worn by men, particularly in the summer time, is unsuitable, uncomfortable and unnecessary. The more freedom the body is given, and the more of the skin exposed to the air and sunshine, the more we favor health and development. Women are far ahead of men in the matter of sensible dress. Shorter shirt sleeves and fewer starched collars are the latest problems

of the men's clothing reform movement, and one official said, "If women are to be allowed freedom of the knees, why should not men at least be allowed freedom of the elbows and Adam's apple?" Dr. Eugene L. Fiske, medical director of the Life Extension Institute of New York, says that a man's shoes alone weigh four ounces more than the entire outfit of a woman.

Commenting upon the appropriateness of women's dress, its lightness, airiness and utility, a jester remarks that the dress on the average flapper reminds him of a barbed wire fence—it protects the property but does not obstruct the view! All joking aside, men, usually considered vindictive and less given to conventionalities, are a set of blooming idiots to follow the fashion dictates of the day concerning heavy clothing, starched collars, and other covering that is uncomfortable and unsanitary. We dislike to think of seeing hairy breasts, bony backs and ugly looking legs of men who follow the example of women in the matter of dress, but we would like to see the men revise their dress so that they will be more comfortable than they are now with their superfluous clothing.

THE installment plan has been invoked by the Chicago Medical Society for the benefit of those who are sick and unable to make prompt payment.

The new financial arrangement is called "the modern medical budget plan" and its purpose is to finance worthy sick persons on a cost basis, the patient to make repayment in weekly or monthly installments over a period commensurate with his ability to pay.

Dr. James H. Hutton, president-elect of the society, said the plan "simply adapts to the sick the modern method of financing employed by the automobile, the radio and other industries, and enables the family of moderate means to arrange for medical or hospital care on a time-payment plan."

Dr. Hutton said the plan would keep down the cost of illness by minimizing the risk of financial loss to doctor and hospital, and by doing away with indiscriminate charity.

Under the plan, the patient summons the physician of his choice, who diagnoses the case, indicates the course of treatment and then estimates the cost. The doctor fills out a card which serves as authorization to finance a loan to the patient at six percent interest for the physician's individual account.

As soon as the loan is made, the physician is mailed a check for 35 percent of the total bill. The balance is paid to him by the finance corporation in installments consisting of one-half of all moneys still due, principal and interest, when and as collected. The patient is completely financed, Dr. Hutton said, and the physician finally receives 86.37 percent of his total fee. The finance organization retains 13.63 percent as the doctor's con-

tribution to the plan, and it creates a special fund against which all bad loans are charged.—*Associated Press*, June 27.

A WELL-KNOWN Indianapolis physician reports the following incident: A salaried man who for many years had been considered almost a charity case as a result of much sickness in his family finally was called upon to take his wife to the hospital for a major operation. Much to the attending physician's surprise, the patient was found in one of the most expensive rooms in the hospital and in the care of a trained nurse, though both seemed wholly unnecessary. During the time that the patient was in the hospital there were numerous unnecessary extras demanded by the patient which added to the size of the hospital bill. Later the attending physician learned that the large hospital bill had been paid in cash, and yet the attending physician did not receive a penny for his services, nor had he received a penny for services rendered during the preceding three years. Someone will say that such a family represents a case of bad management, but we think it is an example of unappreciativeness of medical and surgical services and the rankest kind of imposition upon the family doctor who makes a mistake in showing the limit of leniency and charity to such people. There are many belonging to the so-called middle class that have expensive tastes which are gratified at the expense of others. They usually pay for their luxuries, but in a measure get out of paying for the necessities, and so far as medical services are concerned, they are the last to be paid for and oftentimes never receive any consideration of any kind whatsoever. Physicians should not be Shylocks and demand the pound of flesh, but they should insist upon being remunerated for services in accordance with the ability of the patient to pay. The patient who expects the most expensive room in the hospital and all the luxuries that go with it should be compelled to accept accommodations that are in keeping with his pocketbook and save the excess for necessities, of which medical service is one.

WE have been asked why public swimming pools like those conducted by athletic associations, and organizations like the Y. M. C. A. and Y. W. C. A. are permitted to exist if they are so dangerous as we have intimated in some of our editorial comments. Our answer is that few pools are inspected and supervised properly, and in fact we doubt if there is a single swimming pool in Indiana that regularly conforms to the regulations of the Indiana State Board of Health. Many busy city physicians can report cases of respiratory diseases or middle ear infections that have been traced to swimming pools. So great is the danger of contracting disease from the indoor swimming pool that many physicians absolutely

condemn such pools in general, and in particular those pools that are patronized generously.

The trouble is that few pools are disinfected properly, and the bacteriological standard established by boards of health have been met rarely. Then again, not sufficient supervision is exercised to keep out of the pool all persons who are afflicted with infectious diseases. The rule that every bather must take a soap wash and shower bath before entering the pool is not rigidly enforced, nor is there sufficient enforcement of the rule that persons with catarrhal affections, skin eruptions, discharging ears, infected eyes, and having other communicable diseases be prohibited from using the pool. In short, if a public swimming pool is to be safe and sanitary at all times the supervision and management of the enterprise will require far more attention than is given to one out of twenty of the pools throughout the country, and we do not know of a single pool in the state of Indiana that can at all times be considered even reasonably safe. This does not mean that swimming pools cannot be made safe, but if safety is to be assured it will require far more attention, and particularly concerning examination of those who are permitted to use the pool, than is generally employed.

WE have been very much amused to receive a complaint from one of our readers concerning the alleged untrustworthiness of one of the advertisements in *THE JOURNAL*. In reality one would have to split hairs to find fault with a firm that has a splendid reputation and about whom we never before have heard complaint. However, our amusement increases through a knowledge that the very physician who is getting so critical about the character of the advertising in *THE JOURNAL* is guilty of patronizing some pharmaceutical houses that could not under any circumstances advertise in *THE JOURNAL* unless they changed their manner of doing business. *THE JOURNAL*, during the twenty-one years of its existence, has attempted to carry only such advertising as can be considered as trustworthy and in every sense ethical. During that time thousands of dollars worth of advertising offered *THE JOURNAL* has been refused, either because the advertising itself was misleading, or the products represented by the advertising were considered untrustworthy. Naturally, it would be supposed that the members of the Indiana State Medical Association would uphold this policy by not only patronizing the advertisers in *THE JOURNAL* but refusing to patronize firms having questionable reputations and whose advertising *THE JOURNAL* refuses to accept at any price. Physicians can determine whether firms soliciting patronage are worthy of confidence or not, and so far as the trustworthiness of pharmaceutical preparations is concerned it is not only the privilege but the duty of physicians to find out from the Council on Pharmacy and

Chemistry of the A. M. A. the exact status of any preparation concerning the composition and quality of which there is the slightest uncertainty. Unfortunately there are altogether too many physicians who seem to think that they cannot be told anything to their advantage, and particularly by their confreres, so they go on following their own inclinations which altogether too frequently leads them into trouble, or at best does not advance their interests.

THE Indiana University School of Medicine will have a very interesting scientific exhibit at the Evansville session. The Laboratory of Surgical Pathology will have a demonstration of actual cutting and staining processes in the examination of gross specimens. There also will be exhibited mounted museum specimens that will prove interesting. The Department of Surgery will have a display, with motion picture exhibits of the work recently done in that department, with particular reference to thyroid problems. The Department of Bio-chemistry will exhibit some methods to determine the alcoholic content in the blood, with a view of simplifying our methods of determining the extent of alcoholism or drunkenness in an individual, and this department also will display the results of other practical laboratory knowledge. The Department of Pathology and Bacteriology will display some mounted specimens, with a statement as to the points in diagnosis which were made before the removal of the specimens, and the practical lessons to be taught by such a study will be explained. The Department of Physiology at Bloomington has been asked to participate in the exhibit but their definite plans have not been announced. In addition to the University exhibits, the State Board of Health will have a display of interest to physicians concerning the methods of State Board activities. Dr. Albert E. Sterne, of Norway's Sanitarium, again will have his splendid exhibit which he originally made for the A. M. A., together with the additional improvements that are possible. The United States Department of Agriculture will cooperate with the Indiana branch of their Meat Inspection Department and with the Scientific Exhibit Committee of the Association. They have collected rare and unusual meat specimens showing pathology that will be of interest to physicians. The specimens will be displayed and the significance and relationship of the pathology to the human organs will be explained.

THE Massachusetts Department of Public Health is making an effort to acquaint physicians with modern methods of treatment as a preventive of diabetic coma. Spectacular recoveries have been reported by those who have been giving diabetes and its complications serious study. It

is recommended that physicians try to instill into the minds of every diabetic that whenever he feels ill and sick he should (1) call his doctor, (2) go to bed, (3) take a hot drink every hour, (4) take an enema, (5) keep warm, (6) get a nurse or someone to care for him. Another good rule is to have boiled water ready for the physician when he arrives in case he wishes to use it.

Minor differences in the treatment of coma exist, but all agree that promptness in diagnosis is everything, and next to it comes energetic treatment at the earliest possible moment. If coma exists the physician must give up everything else until the patient comes out of it. Insulin usually is required every half hour in ten or forty-unit doses or more, varying with the severity of the symptoms, and if it is given intravenously it always should be given subcutaneously at the same time. Dehydration of the patient must be overcome by the subcutaneous injection of normal salt solution, and one cannot rely on fluids given by mouth or rectum. The heart is always weak and needs stimulation with caffeine, sodiumbenzoate, seven and one-half grains, and this may be given every hour, if need be, for three or four doses. On account of the weakness of the heart, salt solutions must be injected very slowly if given intravenously. With children, and usually with adults, the stomach is distended and unless it is evacuated prevents the subsequent retention of liquids such as water, gruel, ginger ale, or the juice of two or three oranges; in other words, carbohydrate amounting to fifty drams. Therefore, gently wash out the stomach.

These recommendations are offered by Dr. Elliott P. Joslin, of Boston, who will talk on the subject at the Evansville session of the Indiana State Medical Association, and are endorsed and promulgated by the Massachusetts Board of Health.

Time (August 5, 1929) seems concerned because there are only two medical schools for the ten million negroes in the United States. These two schools have about two hundred fifty enrolled, and graduate about fifty yearly, and the few medical colleges for white students that also will accept negroes graduate about twenty-five negroes yearly. The question then is raised, how are these one hundred twenty-five negro graduates to get their hospital experience which is reckoned as necessary before a physician is trustworthy for general practice? There are only seven good negro hospitals in the United States, and they can accommodate only fifty interns yearly. Practically none of the remaining seventy-five can get positions in general hospitals, and in consequence they must get work in dubious private hospitals and sanitariums or else start practicing unprepared. It is thought that their medical inexperience makes patients distrust them, so that resort

is made to home remedies or the patronage of white doctors.

We believe that *Time* is unnecessarily concerned, and for the reason that a large number of general hospitals admit negro patients and give them very trustworthy service. Likewise there are a great many white physicians in private practice who give negroes conscientious service and will continue to do so. As a mere sidelight on the question, it is a well known fact that many negroes will ignore a perfectly competent and well-trained negro physician and go to a white physician of less ability and experience. The solution offered by *Time* already is in effect in several localities where no discrimination is made between white and negro medical students or interns in schools or hospitals. It is questionable if a school or hospital limiting itself entirely to negroes can be made thoroughly efficient as compared to similar institutions managed by the whites, for in the main the negroes do not lend themselves to advanced teaching and practice. It may be admitted that more attention should be given to the medical care of the negroes, but for the present that must come from the whites.

A NEW YORK physician gives his experience, in detail, in rendering medical charity (*New York State Journal of Medicine*, June 15, 1929) and quotes from carefully kept records, included in which was a record of charity work, charged at charity prices, though rendered gratuitously. Some of the work included that in the charity wards of hospitals, the clinics, his personal charity work in his offices, services rendered Boy Scout camps, even to Scouts coming from wealthy families, those sick in time of disaster, and to supposedly worthy cases referred by friends. In addition to the services rendered there was another loss from medicine, drugs and equipment, furnished gratuitously in many instances. Thus the physician gave to his community about twenty-five thousand dollars in charity work, much of which should have been repaid to him or credited to him on a financial basis to offset the cry of what the endowments and charitable citizens had done for the indigent in their community. This physician said he was scored bitterly time and again for his small donations when the subscription list was being passed around, and though he felt he must subscribe something to each charity, yet his charity and church gifts were over one thousand dollars a year, some of the gifts going to organizations or institutions where the executives thereof were drawing goodly salaries and where he was giving his professional services for nothing and even did not receive so much as a letter of thanks at the end of the year. The physician then closes with the following significant statement: "How are we to stem the tide and tendency whereby more and more of the

physician's time, brains and even money is sought for, yes and in some instances even commanded under covert threat of club, church or fraternal boycott in the guise of free charity, while the business man insistently demands of the doctor that his bills be paid and while the doctor carries away the stigma of being a poor payer. Rich he may be in work done, but too poor if honest, to meet his just debts, rear a family and maintain a decent standing in life unless the economic pressure of the charity demand from so many angles be less and the doctor receive just pay for his services rendered to all."

THE *Literary Digest* for August 24 gives considerable prominence to a discussion of "The Economics of Medical Service," contributed to *The American Journal of Public Health* by Dr. W. S. Rankin, director of the hospital and orphan section of the Duke Endowment, Charlotte, North Carolina. It is suggested that the cost of illness or to repair damages inflicted by it may be very greatly reduced by organizing and coordinating medical service, and by introducing illness insurance. Dr. Rankin says that there are two ways of lowering the cost of medical care. One way is by the prevention of unnecessary disease, and the other way is through the use of an organized medical service. An organized medical service can be offered for financial returns considerably smaller than the cost would be if the patient obtained the same service from unrelated practitioners and specialists. An example is then cited of the Universities of Michigan, Minnesota and California that are able to render a thoroughly modern medical service, including hospital care, to their students for from nine to twelve dollars per student a year. A corporation with 16,000 employees and their families, representing a total population of not less than 60,000 people, gives to this group, including employees and their families, a medical service which includes the full-time services of twenty-seven physicians, three dentists, one x-ray technician, fifty-one nurses, and two pharmacists, for an annual cost of six to seven dollars per capita for the whole industrial population. An industrial settlement composed of the workers of six mills, gives a very modern, efficient medical service, including hospital care, home visits, and public health nursing, for \$23.60 per family, or at approximately nine dollars per capita. Dr. Rankin then goes on to say that the insurance principle appears to be the only remedy, but a most effective one for providing adequate medical care for a very large percentage of the people. He says that only a beginning has been made in its application and that as its value becomes more generally recognized we may expect to see the large insurance companies embrace it as a part of their protective program.

This shows the trend of the times and indicates

quite clearly that similar plans will be adopted for a variety of community interests. It spells the doom of the family physician as ordinarily known, as it also spells the doom of independence on the part of practically all practitioners of medicine who eventually will be depending upon insurance companies or other organizations for compensation covering services rendered, and the amount of the compensation will depend upon the generosity of the corporation or company. It goes without saying that a majority of the physicians will be salaried employees and the position on but a little higher plane than the skilled workers in the factory. This may be a pessimistic view, but is quite in line with our previous prognostications which we feel certain will prove true.

MEDICO-LEGAL DEPARTMENT

ALBERT STUMP

ATTORNEY FOR THE ASSOCIATION
INDIANAPOLIS

Introduction: The amount of law there is has become a subject to which public attention is being attracted more and more. It has been discussed frequently on the public platform and in magazine and newspaper articles within recent years. The whole body of law is of formidable size. Yet a general familiarity with that part of it which is of general application is necessary to keep one's conduct fairly within its limits; and that general familiarity exists is a result of the work of the many agencies through which information of all kinds is disseminated.

The principles of law may be stated in very broad generalizations. When so stated the number of them is not large. They are more or less known to everybody. The application of those principles to the facts of specific cases results in the sharper definition of them in the light of their special application to the specific facts. Legal difficulties arise in searching for the definite boundary lines of the principles whose general scope everybody knows.

The same general body of law whose principles are stated in the broad generalizations with which all are more or less familiar are applied to farming and dairying, bridge building, operating a railway system, mining engineering, practicing medicine and law, and any other enterprise in which one may engage. Legal experience, within any of these fields in which there are human rights involved that the law defines and protects, will in time build up a specialized body of law exemplifying the application in such special fields, of the same general principles whose application in some other field would be exemplified by another special body of law in that field.

Since I have been lecturing on Medical Jurisprudence in the School of Medicine in Indiana University, and attorney for the Indiana State Medical Association, I have had quite a number

of communications directly from physicians, and quite a number of communications from the Secretary of the Association have been referred to me for reply, submitting questions of law which I am convinced would be of interest to the profession generally. No doubt there are many such questions occurring to physicians which they would like to have answered, but which they do not find concerns themselves in such an individual way that they feel justified in obtaining the opinions of their personal attorneys on them.

A department in *THE JOURNAL* devoted to legal questions of interest to physicians, it seems, would furnish an excellent medium through which the members of the Association might have their individual problems discussed and solved, if possible; and at the same time it would serve to familiarize physicians more widely with that special body of law which has developed about the medical profession.

I believe this department can be conducted most satisfactorily in the question and answer method. That method gives the constant element of vitality always found in discussions of the actual problems involving one's immediate interests, and at the same time prevents the department from becoming impractical and academic. I hope that this Legal Department may be kept upon that basis. It will require the cooperation of the members of the Association to the extent at least of sending in questions from time to time. All questions of law pertaining to any phase of the practice of medicine sent in by any member of the Association, it will be my purpose to investigate and answer as fully and accurately as I can. All communications will be kept strictly confidential. Questions sent me by physicians will appear in this department only if the physicians sending them indicate that they are sent with the intention of having the question and the answer published. No other correspondence between myself and the individual members of the Association will appear in *THE JOURNAL*. The names of the physicians sending in the questions to be answered in the pages of *THE JOURNAL* will not be published.

DEATHS

LEVI A. HALE, M.D., of Clay City, died August 1, aged ninety years. Doctor Hale was a Civil War Veteran. He was not in active practice at the time of his death.

C. J. LORING, M.D., of Rochester, Indiana, died July 23, aged seventy-eight years. Doctor Loring graduated from the Medical College of Indiana, Indianapolis, in 1880.

DAVID C. HUFFMAN, M.D., of Poneto, died August 20th. Dr. Huffman was seventy-three

years of age. He graduated from the Miami Medical College, Cincinnati, in 1878.

ORANGE S. RUNNELS, M.D., of Indianapolis, died August 15, aged eighty-two years. He graduated from the Cleveland University of Medicine and Surgery in 1871. He was a member of the American College of Surgeons.

FRANK W. HANNA, M.D., of Indianapolis, died August 8, aged fifty-eight years. Doctor Hanna had practiced medicine in Indianapolis for more than twenty years. He was a graduate of the Medical College of Indiana, Indianapolis, in 1902.

THOMAS L. LOCKHART, M.D., of Owensville, died July 23, aged fifty-nine years. Doctor Lockhart was a member of the Gibson County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Eclectic Medical College, of Cincinnati, in 1899.

CHARLES H. YENNE, M.D., of Washington, died August 16, aged seventy years. He was a member of the Daviess-Martin County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Medical College of Ohio, Cincinnati, in 1884.

GEORGE HAWORTH, M.D., of Kokomo, was killed in an automobile accident, August 13. Doctor Haworth was forty-three years of age. He was a member of the Howard County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Indiana University School of Medicine, Bloomington-Indianapolis, in 1911.

WILLIAM MCC. ENSLEN, M.D., of Fort Wayne, died August 25th, at a hospital in Lima, Ohio. Dr. Enslen became ill while on his vacation at a lake near Lima. Dr. Enslen was sixty-nine years of age. He graduated from the Fort Wayne College of Medicine in 1890, and was a member of the Fort Wayne Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

WILLIAM F. HOWAT, M.D., of Hammond, Indiana, died August 27th, aged sixty years, at St. Margaret's Hospital, Hammond. Dr. Howat was one of the best-known physicians of the Calumet district. He served as president of the Indiana State Medical Association in 1912. He was a captain during the World War and for many years was president of the Lake County Medical Society. Dr. Howat was one of the founders of the Hammond Public Library. He graduated

from the University of Pennsylvania School of Medicine, Philadelphia, in 1892 and was a member of the Lake County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

DR. MARION BEDWELL, formerly of Dugger, has located in Sullivan, where he will practice medicine.

DR. CARL S. OAKMAN, of Muncie, addressed the meeting of the Grant County Medical Society, July 24th, at the Spencer Hotel, Marion.

DR. WERNER W. DUEMLING has announced the opening of his office at 2902 Fairfield Avenue, Fort Wayne. His practice will be limited to dermatology.

DR. PAUL WILLIAMS, of Indianapolis, will open an office for the practice of medicine at Monticello. He will occupy offices formerly used by Dr. Gable.

THE Indiana Academy of Ophthalmology and Otolaryngology will hold its annual session at French Lick, Thursday and Friday, December 12 and 13, 1929.

THE Washington County Medical Society held a meeting at Palmyra, August 7th. Dr. Frank A. May, of Palmyra, presented a paper on "Pernicious Anemia."

DR. W. H. MILLS has returned to Boonville, where he will again take up the practice of medicine. Dr. Mills has been practicing at Lynnville for several years.

DR. OSCAR C. BREITENBACH, of Waukegan, Illinois, formerly of Columbus, Indiana, died August 14th at a Chicago hospital. Death was due to blood poisoning.

DR. JOSEPH L. STOREY, of Sullivan, has gone to Vienna, where he will take postgraduate work in surgery. Dr. Storey will visit in Naples and on the island of Sicily, where his mother lives.

DR. JOHN CALVIN CARNEY, son of Dr. C. E. Carney, of Delphi, has rented the office formerly occupied by Dr. J. D. McCann, of Monticello, and has located there for the practice of medicine.

At the annual meeting of the American Bronchoscopic Society held in San Francisco recently, Dr. Thomas E. Carmody, of Denver, was made president and Dr. Louis H. Clerf, Philadelphia, secretary.

THE U. S. Civil Service Commission announces open competitive examination for junior zoologist, applications for which position must be on file with the Civil Service Commission at Washington, D. C., not later than September 24th.

DR. HENRY S. LEONARD was elected president of the board of health of Indianapolis at the annual meeting, July 30th, to succeed Dr. Frederick E. Jackson. Dr. Herman G. Morgan was reappointed secretary of the board, and Dr. William A. Doeppers superintendent of the City Hospital.

DR. E. B. WOODS, resident in obstetrics at the Buffalo City Hospital, has finished his service with that institution and is seeking appointment as assistant to some busy surgeon who desires someone to do obstetrics and assist him. Dr. Woods' home address is 66 Schauf Avenue, Buffalo, New York.

AT the annual meeting of the American Society of Clinical Pathologists, held at Portland, Oregon, July 8th, Dr. James H. Black, Dallas, Texas, was made president, Dr. Kenneth M. Lynch, Charleston, South Carolina, president-elect, and Dr. Harry J. Corper, Denver, re-elected secretary-treasurer.

THE twelfth annual meeting of the American Dietetic Association will be held in Detroit, October 7th to 11th, with headquarters at the Statler Hotel. Complete information concerning the program may be obtained from Dorothy Knight Hassler, National Chairman of Publicity, 5151 Guilford Avenue, Indianapolis, Indiana.

ON August 1, 1929, the cornerstone of the Riley Memorial Hospital for Children, Kiwanis Wing, was laid with appropriate ceremonies. This addition to the Riley Hospital will cost \$150,000 and this sum was raised by the 4,200 members of the seventy Kiwanis clubs of Indiana. The wing will add fifty beds to the hospital, and that these beds are much needed is attested by the fact that there are more than one hundred and seventy-five on the waiting list. The Kiwanis Wing will be one story in height, as will be all future wings of the hospital. It will be surrounded by a broad pavilion onto which the beds may be wheeled on sunshiny days. One of the features of the wing will be a research laboratory, for which \$5,000 was contributed by Mrs. McCullough, of Marion, Indiana, wife of the first district governor of Kiwanis, in memory of Mr. McCullough, deceased. It is expected that the Kiwanis wing will be dedicated sometime early in January of the coming year.

In addition to the articles already enumerated, the following have been accepted by the Council

on Pharmacy and Chemistry of the American Medical Association:
Abbott Laboratories:
Viosterol—Abbott.
Benzol Products Company:
Neocinchopen—B. P. Co.
Diok X-Ray Company:
I-X Barium Meal.
Parke, Davis & Co.:
Parke, Davis & Co.'s Viosterol.
E. R. Squibb & Sons:
Viosterol Squibb, 100 D.
Squibb's Viosterol Cod Liver Oil, 5 D.
Squibb's Viosterol Cod Liver Oil—5 D., Mint Flavored.
Terrell's Laboratories:
Rabies Vaccine Phenolized—Terrell.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

August 23, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the last meeting of the Bureau read and approved.

The release, "Another Fallacy Passes," read and approved for publication Saturday, August 31, 1929.

The following releases have appeared in the newspapers during the summer months:

July 6—"Hot Weather Health Hints."

July 13—"Iced Drinks in Hot Weather."

July 27—"Strenuous Week-ends."

August 3—"Rabies or Hydrophobia."

August 31—"Another Fallacy Passes."

The following radio talks have been broadcast during the summer months:

July 6—"Hot Weather Health Hints."

July 13—"Iced Drinks in Hot Weather."

July 20—"Strenuous Week-ends."

July 27—"Rabies or Hydrophobia."

August 3—"Insects That Carry Disease."

August 10—"Shock Troops Against Disease."

August 17—"Running Water Is Not Always Pure."

Preliminary copy of the annual report of the Bureau to the House of Delegates was prepared and presented to the members of the Bureau. The members of the Bureau were asked to review this report and make suggestions for the final draft, which was to be prepared the week of August 26.

The following reports of medical meetings were received:

June 4—County Medical Society, Danville, Illinois. "Health Fads and Foolishness."

July 31—Kiwanis Club, Muncie, Ind. "Modern Business and Heart Disease."

Letter received from the American Dietetic Association announcing the annual meeting of the Association which is to be held at Detroit October 6 to 11, 1929.

The following bills were approved for payment:

A. B. Dick Company.....	\$ 4.00
Central Press Clipping Service.....	5.76

\$ 9.76

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole August 30, 1929.

INDIANA STATE BOARD OF HEALTH
DIVISION OF COMMUNICABLE DISEASES
MONTHLY REPORT, AUGUST, 1929

The morbidity reports sent in by the health officers of the state show a marked increase over the previous month, except measles and smallpox. The name and number of diseases reported from the urban and rural population are as follows (urban including cities of 2,500 and over and rural all under 2,500 population): Negative morbidity report for the month was 524 cards.

Diseases	Total Reported	Urban	Rural
Tuberculosis	294	169	125
Chickenpox	19	11	8
Measles	91	82	9
Scarlet fever	190	141	49
Smallpox	114	94	20
Typhoid fever	43	13	30
Whooping cough	179	95	84
Diphtheria	63	40	23
Influenza	29	2	27
Pneumonia	4	0	4
Mumps	10	5	5
Poliomyelitis	2	1	1
C. S. Meningitis	5	4	1

Smallpox shows a decrease. The previous month 166 cases were reported and 114 cases during the month. The estimated expectancy for August is 65 cases. The estimated expectancy is based on the experience of the last seven years.

Measles also shows a decrease over the previous month. Last year same month reported 60 cases; last month reported 184 cases. Ninety-one cases were reported for this month.

Scarlet Fever. Corresponding month last year reported 94 cases. One hundred ninety cases were reported this month; 160 cases for last month. May and June, 1,090 and 564 cases, respectively. The estimated expectancy was 98 cases.

Diphtheria shows a slight increase for this month. Sixty-three cases were reported for this month, while 44 cases were reported last month. Same month last year reported 38 cases.

Typhoid Fever shows a large increase. Forty-three cases for this month; last month 19 cases. Last year same month 87 cases were reported. This is typhoid fever time.

Cerebro-spinal meningitis shows an increase for this month, three cases being reported in July. The five cases reported this month were from Hendricks, Kosciusko, Marion and Vigo Counties. Two cases were reported from Vigo County, while Hendricks, Kosciusko and Marion Counties each reported one case.

The name and number of diseases reported during the month not mentioned above are as follows: Tuberculosis, 294; chickenpox, 19; whooping cough, 179; influenza, 29; pneumonia, 4; mumps, 10; poliomyelitis, 2; C. S. meningitis, 5.

H. W. McKANE, M.D.,
Collaborating Epidemiologist,
U. S. P. H. Service.

HENDRICKS COUNTY MEDICAL SOCIETY

E. Ray Royer, M.D., was host for the Hendricks County Medical Society, July 26th, at North Salem. Dr. L. E. Eisman, of Indianapolis, presented a paper on "Sinus Infections" and Dr. C. B. Thomas, of Plainfield, read a paper on "Obstetrics from the Standpoint of the Country Practitioner." A general discussion of both subjects followed.

A chicken dinner was served to seventeen guests in the dining room of Dr. Royer's office building. Indianapolis guests were Drs. L. E. Eisman, O. K. McKittrick and J. T. Bird.

Respectfully submitted,
W. T. LAWSON, Secretary.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Any information concerning these books will be supplied on request. Books received:

OUTLINE OF PREVENTIVE MEDICINES. For Medical Practitioners and Students. Prepared under the auspices of the Committee on Public Health Relations, New York Academy of Medicine. Twenty-one contributors. Editorial Committee: Frederic E. Sondern, Charles Gordon Heyd and E. H. L. Corwin. 398 pages. Flexible binding. Price \$5.00. Paul B. Hoeber, Inc., New York, 1929.

THE COMMON HEAD COLD AND ITS COMPLICATIONS. By Walter A. Wells, A.M., M.D., F.A.C.S., Professor of Otolaryngology, Georgetown University, Washington, D. C. Introduction by Hugh S. Cumming, Surgeon-General, U.S. Public Health Service. 225 pages, with illustrations. Cloth. Price \$2.75. The MacMillan Company, New York, 1929.

MEDICAL STATE BOARD QUESTIONS AND ANSWERS. By R. Max Goepf, M.D., Professor of Clinical Medicine in the Graduate School of Medicine, University of Pennsylvania. Sixth edition, thoroughly revised. Octavo volume of 754 pages. Cloth. Price, \$6.00. W. B. Saunders Company, Philadelphia and London, 1929.

THE SURGICAL CLINICS OF NORTH AMERICA. (Mayo Clinic Number). Volume 9, Number 4, for August, 1929. 208 pages with 72 illustrations. Per clinic year (February, 1929 to December, 1929), paper, \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia and London, 1929.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

ISAROL-CIBA.—SULPHONATED BITUMEN, N. F.—A preparation obtained by dry distillation of bituminous shale. The distillate is sulphonated with sulphuric acid and subsequently neutralized with ammonium carbonate. The product complies with the standards for sulphonated bitumen, N. F. It has the actions and uses of sulphochthyolate preparations and substitutes (New and Nonofficial Remedies, 1929, p. 398). (*Journal of the A. M. A.*, July 6, 1929, p. 33.)

AMPOULES OF PITRESSIN.—An aqueous solution containing the pressor and diuretic-antidiuretic principle of the posterior lobe of the pituitary gland (betahypophamine) containing less than 1 unit of oxytocic activity per cc. It is standardized by the method of Hamilton & Rowe so that each cc. contains 20 pressor units (1 unit represents the pressor activity exhibited by 0.5 mg. of standard powdered pituitary U. S. P.). This product is used for temporary stimulation of blood pressure, for increasing the muscular activity of the bladder and intestinal tract, also for anti-diuretic effect in diabetes insipidus. It is marketed in 1 cc. ampoules. Parke, Davis & Co., Detroit.

AMPOULES OF PITOCIN.—An aqueous solution containing the oxytocic principle of the posterior lobe of the pituitary gland (alphahypophamine) containing less than 0.5 unit of pressor activity per cc. It is standardized by the U. S. P. method for pituitary, each cc. containing 10 International units. This product is used to stimulate uterine contractions for obstetric purposes. It is marketed in 1 cc. ampoules. Parke, Davis & Co., Detroit. (*Journal of the A. M. A.*, July 13, 1929, p. 117.)

RABIES VACCINE (PHENOLIZED).—An antirabic vaccine (New and Nonofficial Remedies, 1929, p. 356) prepared according to the general method of David Semple (phenol killed). It is marketed in packages of 14 vials, each containing 3 cc., and in packages of 21 vials, each containing 3 cc. Terrell's Laboratories, Fort Worth,

Texas. (*Journal of the A. M. A.*, July 27, 1929, p. 283.)

PROPAGANDA FOR REFORM

THE GLOVER HEIGHT-INCREASING FRAUD. — Clara Louisa Glover and "Bernard Bernard" (the latter's real name, according to the federal authorities, is Trappschuh) were engaged in exploiting a device for the alleged purpose of increasing the height of those who desired to be taller. Neither Glover nor Trappschuh is a physician. Trappschuh under the name "Bernard Bernard" publishes books on sexual subjects and fad diets. The device itself consisted essentially of a halter to be placed about the head of the user which permitted adjustment to a height which would barely enable the user to touch the floor with his feet. After investigating the device and the claims that were made for it the postoffice authorities closed the mails to "L. Glover, Specialist" and "L. Glover" at Sausalito, California. Glover and Trappschuh then transferred their operations from California to Chicago, and advertised the device under the trade name "Glover Institute." Accordingly the postoffice authorities extended the fraud order to cover the name of the Glover Institute at Chicago. (*Journal of the A. M. A.*, July 6, 1929, p. 53.)

GLUCO-DEXTRIN No. 1, GLUCO-DEXTRIN No. 2 AND GLUCO-DEXTRIN No. 3 NOT ACCEPTABLE FOR N. N. R. —The Council on Pharmacy and Chemistry reports that Gluco-Dextrin No. 1, stated to be "Dextrose 45.75%, Dextrin 51.86%, moisture Q.S.", Gluco-Dextrin No. 2, stated to be "Dextrose 39.50%, Dextrin 45.61%, Lactic Acid 12.50%, moisture Q.S." and Gluco-Dextrin No. 3, stated to be "Dextrose 45.75%, Dextrin 51.86%, Potassium Bicarbonate 2%, moisture Q.S.", are marketed by the West Manufacturing Company. The first is apparently nothing more nor less than glucose U.S.P.; the second and third are apparently the same, with the addition of lactic acid U.S.P. and potassium bicarbonate, respectively. The Council points out that there appears to be no good reason why an official article and mixture of official articles should be marketed under these proprietary names. It calls attention to unwarranted claims that are made in the advertising for these products. The Council declared Gluco-Dextrin No. 1, Gluco-Dextrin No. 2 and Gluco-Dextrin No. 3 unacceptable for New and Nonofficial Remedies because the one is an official article and the others are mixtures of official articles marketed under proprietary names with unwarranted therapeutic claims. (*Journal of the A. M. A.*, July 13, 1929, p. 117.)

BACTERIOPHAGE AS A THERAPEUTIC AGENCY.—The bacteriophage has been slow to gain acceptance as a possible agent in the warfare against infection. Recent investigations show the many difficulties connected with the successful use of bacteriophage and also the advantages which they have over other agents. While bacteriophage preparations give promise of eventually becoming valuable additions to the physician's armamentarium, it should be remembered that the whole subject is still in the experimental stage. When vaccine therapy was new and in the ascendancy, manufacturers offered specific vaccines for almost every human ailment and "mixed vaccines" of startling complexity. The Council on Pharmacy and Chemistry not only rejected most vaccine mixtures but has during recent years been obliged to omit a considerable number of simple vaccines because the results obtained with them did not measure up to the evidence which investigators supplied in the height of enthusiasm. Manufacturers are already marketing bacteriophage preparations, simple and mixed. Warrant for the use of such mixtures has not so far become evident and the Council on Pharmacy and Chemistry has postponed the acceptance of simple preparations to await further evidence in favor of their usefulness. (*Journal of the A. M. A.*, July 13, 1929, p. 121.)

MORE DEATHS FROM THALLIUM.—Three more deaths from thallium poisoning are reported. Three boys, aged ten, eleven and twelve years, respectively, received suc-

cessive doses of thallium acetate for ringworm. Although influenza had left one of them apathetic and the other two were mentally dull since birth and all three were undernourished, the dose of 0.008 gm. per kg. of body weight was either given or its administration begun. The effort to give the calculated amount in divided doses caused death as have other similar attempts. Only one dose should be given and for children infirm in any way, this should be less than the usual amount. (*Journal of the A. M. A.*, July 13, 1929, p. 122.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture, which enforces the Federal Food and Drugs Act: Rheu-Salic Tablets (The Waterbury Chemical Company), containing acetphenetidin and magnesium salicylate in amounts less than declared. Dynell Water (The Dynell Spring Water Company), containing no ingredient capable of producing the effects claimed. Vibunol Johnson (Johnson's Female Regulator) (E. B. Goico), a water-alcohol solution of drug extracts together with sugar. Migratone Anti-Rheumatic Tablets (The Waterbury Chemical Company), containing salicylic acid in amount less than claimed. Methalgine Comp. Capsules (The Waterbury Chemical Company), containing morphine sulphate, acetanilide, acetphenetidin and sodium salicylate in amounts less than claimed. (*Journal of the A. M. A.*, July 13, 1929, p. 138.)

TAMERICI SALTS NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that according to the Banfi Products Corporation, Tamerici Salts is "natural salt extracted from the Tamerici Spring of Montecatini," Italy, and that the formula given for the product shows that this is almost pure sodium sulphate (Glauber's Salt). The Council finds Tamerici Salts unacceptable for New and Nonofficial Remedies because it is an unessential modification of sodium sulphate, sold under a noninforming name and without a declaration of composition on the label. Such exploitation is not in the public interest since it tends to confuse the lay mind and increase the tendency to self-medication. (*Journal of the A. M. A.*, July 27, 1929, p. 283.)

BISMUTH IN SYPHILIS.—The principles that apply to the selection of water soluble as compared with oil suspended insoluble preparations of bismuth in the treatment of syphilis would not seem to be essentially different from those now recognized for the use of mercury preparations except for the fact that bismuth preparations in general are pharmaceutically more eligible than are the corresponding mercurials. A water soluble bismuth salt should be selected when a rapid transient effect is desired, and the administration of such a preparation should be more frequent than that of an oil-suspended, insoluble one.—(*Jour. A. M. A.*, June 22, 1929, p. 2123.)

LEVULOSE AND ARTICHOKE IN DIABETES.—There is still considerable dispute as to the action of levulose in diabetes. One thing that stands out is that levulose, although well borne at first, hyperglycemia and glycosuria soon make their appearance. Jerusalem artichokes contain approximately sixteen percent of carbohydrate, chiefly inulin, which on hydrolysis yields levulose. Joslin showed that it was possible to substitute fifteen Gm. of carbohydrate from Jerusalem artichokes for 5 Gm. from five percent vegetables, but has cautioned that a small dosage should be used to avoid the danger of gastric upset. At a recent meeting of the American Chemical Society a paper was read reporting experiments in which varying quantities of dried artichoke and inulin were used in the diet of a diabetic patient: the conclusion reached was that Jerusalem artichokes are of doubtful value as a source of carbohydrate for diabetics.—(*Jour. A. M. A.*, June 22, 1929, p. 2124.)

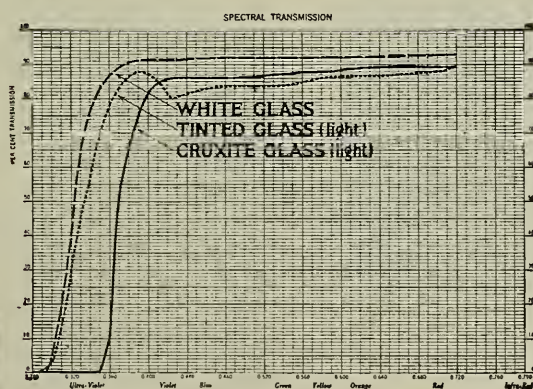
KERASOL AND KERAPHEN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that in the advertising of the Picker X-ray Corporation,
(Continued on page xx.)

CRUXITE LENSES absorb

**practically all ULTRA VIOLET
and just enough VISIBLE RAYS
to produce summer eye comfort**

NOTICE the spectral transmission chart. See for yourself why Cruxite absorption properties guarantee results—reduce glare—provide extra comfort.

Cruxite absorbs practically all of the invisible ultra-violet as well as just enough of the visible rays. Actually, the percentage of light reduction exceeds that of any other lens of equal tint. This high standard is constantly maintained, too, by constant laboratory testing and full patent protection.



Cruxite Lenses may be had in three shades, (A, B, and C), which blend naturally with your patient's complexion. Ugly shadows are never reflected under the patient's eyes.

Don't Squint!



CRUXITE lenses reduce GLARE
AMERICAN OPTICAL
COMPANY

TRUTH ABOUT MEDICINES

(Continued from page 420)

acting as distributor for the Kerasol Chemical Co., New York, the term "Kerasol" is applied to tetraiodophenolphthalein sodium and to capsules containing the drug. The Council further reports that under the name "Keraphen," with "Soluble Kerasol" as a synonym, the Picker X-ray Corporation (as distributor for the Kerasol Chemical Co.) markets a mixture of tetraiodophenolphthalein sodium and tartaric acid. To avoid the confusion that is caused by the application of different names to the same substance, the Council does not recognize proprietary names unless they are applied by the discoverer of an article or by the one who discovers its therapeutic use, or with his consent. When the marketing of a product becomes open to general competition, the Council attempts to coin a convenient title for it, adopts this as the N. N. R. name, and then accepts the marketed brands only if they are offered under the N. N. R. name or the descriptive chemical name. In the case of tetraiodophenolphthalein sodium the Council adopted the contracted name tetiothalein sodium and adopted tests and standards for the control of products admitted to New and Nonofficial Remedies. Since the Picker X-ray Corporation and the Kerasol Chemical Co. are not the discoverers of tetraiodophenolphthalein and since the marketing of this chemical in the form of capsules or in admixture with tartaric acid is not the discovery of these firms, nor of such fundamental importance as to justify the application of special names, the Council declared Kerasol and Keraphen inadmissible to New and Nonofficial Remedies.—(*Jour. A. M. A.*, June 29, 1929, p. 2171).

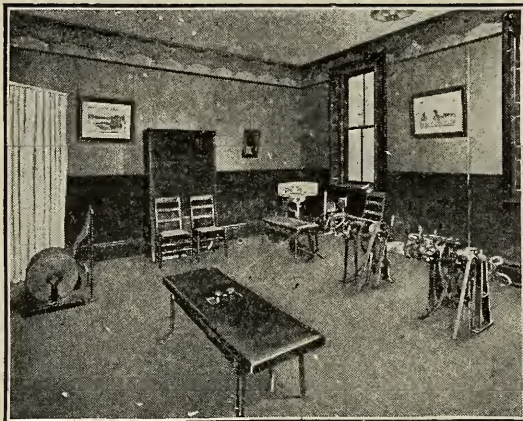
OZONE AND VENTILATION.—The ill effects from lack of ventilation do not arise from any contaminating substance in the air but are due to the physical properties

of the air—chiefly its lack of cooling power. "Bad air" is made so by being too warm, too moist or too stagnant. While ozone has been suggested as a means of neutralizing the carbon monoxide in the air, particularly in garages, this is based on the misconception that it combines with carbon monoxide in low concentrations. Its use in garages is inadvisable, as ozone, by its odor, will give a feeling of false security and thus foster a tendency to cut down ventilation. There has been no sound scientific work brought forward to show that there is any place whatever for ozone in the problems of ventilation; on the contrary the inefficacy of ozone generators has been demonstrated by careful scientific experiments.—(*Jour. A. M. A.*, June 29, 1929, p. 2186).

ABSTRACTS

INTESTINAL PARASITISM SIMULATING APPENDICITIS

DAMASO DE RIVAS, Philadelphia (*Journal of the A. M. A.*, April 6, 1929), concludes that the relation existing between intestinal parasitism and appendicitis clearly points to the advisability, except, perhaps, in acute appendicitis, of making a study, as complete as possible, of the true etiologic factors responsible for the pathologic condition of this organ and the presenting symptoms before an operative procedure is decided on. This is becoming of increasing importance if it is taken into consideration that statistical reports by several investigators in the United States show 10 percent, and as high as 50 percent, of parasitic infestation of the intestine in temperate and northern climates, brought about by the dissemination of parasitic diseases through the recent ingress of peoples from the tropical and oriental countries to these latitudes.



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Medical Director

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DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF INDIANA

ISSUED MONTHLY under Direction of the Council

ALBERT E. BULSON, B.S., M.D., Editor and Manager

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NUMBER 10

ORIGINAL ARTICLES

THE HIGH PEAKS OF MEDICAL HISTORY*

C. E. GILLESPIE, M.D.
SEYMOUR

The earliest medical practice of which we know was wedded to religion. Priests were not only healers of souls, but were accepted as healers of bodies as well. For untold centuries, myth and magic held the center of the stage in the human battle for health. Prayers and incantations were freely used with prescribed remedies. Particular gods were called upon in the administration of particular medicines. Since disease was thought of as a punishment for the violation of moral laws, only obedience to moral laws could eradicate disease. Moses, the lawgiver, was a great sanitation expert. In his ceremonial prescriptions, we find the first known system of organized sanitation. Cleanliness, avoidance of decomposing materials, preservation of water and food, were a few of his practical orders. In Greece Aesculapius was the god of healing, and about him a great cult of health developed. The Hindus excelled all other ancient people in operative surgery, and like all other ancients their priests were their surgeons. The most outstanding development in ancient medical science came with Hippocrates. As a matter of fact modern medicine can begin its history with him, for it was through his influence that medicine and religion became distinct and each developed the possibilities within its own field. When Hippocrates deserted the priesthood for medicine, he made a valuable contribution to both fields. Medicine like religion, has its heretics, and Hippocrates was one of the first of this class. He was not concerned with devils, gods, incantations, magic, or tradition. He was constantly asking: "Why?" He dedicated himself to painstaking research. He was concerned about diagnosis, and applied many of the modern details of examination. His books on fractures, dislocations and wounds compare favorably with anything we have today. In ad-

dition to a scientific spirit, he possessed a code of professional ethics which has not yet been improved upon.

After Hippocrates, the next great figure of the period is Aristotle who gave to science the beginnings of comparative anatomy, embryology, teratology, physiology and botany. He was interested in postmortems on animals and used them in his teaching of anatomy.

Galen (131-201 A.D.) is the founder of experimental physiology. A theorist, with an answer for every problem, Galen was susceptible to fancy systems, many of which did not express realities. In spite of this failing, Galen made lasting contributions. He described the cranial nerves and the sympathetic system. He demonstrated that the arteries contained blood, explained respiration, and came near anticipating Harvey in his study of the heart and movement of the blood.

Between the years of 730-1090 the intellectual fires were dying out all over Europe. Energy was diverted to theological controversies. The achievements of Greek learning in the field of medicine might have been lost had not the followers of Mohamet preserved it. Under the teaching of the heretical, persecuted sect of Nestorius, who had taken up the study of medicine, the Moslems built up excellent hospitals, and medical schools. In Bagdad there were as many as 6,000 medical students at one time. Due to Mohammedan research, alcohol was first produced, and the world received its first account of how a stomach cancer affects its victim. Avicenna (980-1036) was perhaps the leading physician of his time. We are indebted to him for one of the earliest attempts to codify all medical knowledge. In the midst of his task as chief physician to the hospital at Bagdad, he was the author of approximately one hundred works. He gave an account of diabetes. His treatment of spinal deformities anticipated Calot (1896). Mohammedan physicians for most part were objective and materialistic in their thought, and looked with contempt upon such aids to recovery as amulets, saintly relics, and other superstitions. We must not overlook the work of the Arabians in the field of alchemy. In the eighth century, two ruling

*President's address delivered before the Annual Session of the Indiana State Medical Association at Evansville, September, 1929.

passions possessed the mind of the worker in chemicals: transmutation of metals, and the quest for the elixir of life. Geber, worker in the middle of the eighth century, found silver, nitrate, sulphates of copper, iron, aqua regia and purifications of salt, alum, vinegar, arsenic, sal ammonia, salt peter and potash. While neither the hope of changing baser metals into gold or of finding the elixir of life was ever realized, the alchemist did lay a foundation for modern chemistry, and so made a valuable contribution to medicine.

With the coming of the Medieval period, we enter into an age when investigators in every field were under the ban of ecclesiastical authority, and the wonder is not that so little but that so much was accomplished. This was a period of Monastic medicine when there was an implicit belief in the healing power of relics. Scientific medicine went into a decided eclipse, and did not emerge until the eleventh and twelfth centuries. In the twelfth century the University of Salerno became a real intellectual center. Medical and surgical clinics were established. Dissection of animals and occasionally of a human corpse was practiced. Traveling nurses were sent out. Certain names were outstanding in this period: the surgeon, Roger of Palermo who knew of cancer, described hernia of the lungs, recommended iodine-containing substances for goitre, used sutures and ligatures; Guy de Chauliac (1300-1370) who operated for hernia, cataract and cancer. He used the medieval equivalent for anesthesia-soporific inhalation. The study of anatomy was encouraged. In 1100, Capho, the younger, wrote the first modern text on Anatomy. Dissecting long prohibited, was accepted as a necessary practice and students were instructed in anatomy with the human body before them; Roger Bacon, whose chief contribution to medical science is his study of astrology and his viewpoint which insisted upon experiment. A lively contest grew between the well educated surgeons and the surgeon-barbers. Gradually in the thirteenth and fourteenth centuries ordinances were passed in many countries which called for a proper examination before one was permitted to practice medicine. During the Middle Ages attempts were made to formulate some principles of medical jurisprudence. Perhaps the chief contribution of medieval medicine was the organization of hospitals and nursing staffs.

The middle of the fifteenth century saw a revival of learning and a renewed interest in scientific medicine. It is generally called the period of the renaissance. Of the galaxy of names prominent in this period only a few can be mentioned. Paracelsus (1493-1541) a scientific heretic, like so many of the benefactors of humanity, was the father of chemistry and the forerunner of pharmacology. His methods of teaching were not gentle, and in order to correct errors, he burnt the long

revered writings of Galen and Avicenna. He insisted that chemical therapeutics must be substituted for alchemy. The relation between cretinism and endemic goitre was thoroughly studied by him. He made opium, lead, sulphur, mercury, iron, arsenic, copper sulphate and potassium sulphate. He brought tinctures and alcoholic extracts before the public. He caught the concept of catalytic action. Paracelsus was one of the first to urge that a physician's task is to cooperate with nature in the healing of disease. Along side of his science, Paracelsus welcomed a mysticism and a transcendentalism which he thoroughly believed. Art and medicine both acclaim Da Vinci (1452-1519) as the greatest artist and scientist of the renaissance. He was the father of iconographic and physiologic anatomy. He originated cross-section anatomy, delineated the position of the fetus, sketched bones of the skull, spine, feet and hands, and drew cross-sections of the brain. Da Vinci was satisfied with nothing less than a model upon the dissecting table.

With Andreas Vesalius (1514-1564) as Hoffman states, the skeleton came out of its closet. Vesalius was a fanatic for knowledge. He disregarded the still powerful prejudice against dissection, and as Garrison believes, made the practice respectable. He was the father of modern anatomy. He was the first professor of human anatomy when he took that chair at Paudua University. At the age of twenty-five he wrote the volume "Fabric of the Human Body". He is to be credited with the discovery of the ductus venosus, with a description of vena azygos, seminiferous ducts, internal pterygoid and the lingual muscles.

The effect of Vesalius upon surgery is seen in Ambroise Paré (1510-90), with whom modern surgery began. Paré's chief contribution lies in his re-introduction of the ligature to amputated limbs. Paré invented arterial forceps, artificial limbs and eyes, and used the truss in hernia. He made the first exarticulation of the elbow-joint. He described fracture of the neck of the femur, and suggested syphilis as the cause of aneurysm. Dr. Howard A. Kelly suggests that he was the first to see flies as the agents by which disease is communicated. In a case of uterine hemorrhage, he introduced artificial labor.

The outstanding figure in the seventeenth century is William Harvey (1578-1657) whose well known discovery of circulation calls for no further comment. No other man has had greater influence upon modern medicine. Medical science found a new pair of glasses through the efforts of the strange Antonj Van Leeuwenhoek. The finding of microbes in the rain water started a revolution in science which has not yet ceased. Marcello Malpighi was the greatest of the microscopists. To him we are indebted for his study

of the embryology of the chick and the histology and physiology of the glands and viscera. In 1665 he described the red blood corpuscles. He exposed the true nature of the pulmonary tissues, and discovered the capillaries. Transfusion of alien blood was first practiced in this period, and the first attempt at a book on vital statistics is credited to this century.

In the eighteenth century, the first name to mention is that of Linnaeus, who gave the world the binomial nomenclature in science, and a highly scientific classification of plants. Albrecht Von Haller was without question the chief physiologist of his time. He demonstrated that irritability in an excised muscle is the specific immanent property of muscular tissues, and that sensibility is a property of tissues supplied with nerves. With the experiments of Luigi Galvani, electrophysiology had its origin in 1792. Modern embryology started with Wolff (1733-94) who revived the doctrine of epigenesis. The name of John Hunter deserves mention. He anticipated Darwin in his study of origins. He practiced forced feeding, artificial respiration, and described shock, phlebitis, and pyaemia. With him surgery began to assume a place as a branch of medical science. Elaborate studies of inflammation, gunshot wounds, and surgical diseases of vascular system were due to him. He established the principle that aneurysms due to arterial disease should be tied high up in healthy tissue by a single ligature. Hunter studied the teeth in a scientific manner. He was the founder of experimental and surgical pathology and did some of the earliest work in the field of comparative physiology. To Leopold Auenbrugger we are indebted for the art of percussion in diagnosis. He was followed by Laennec who invented the stethoscope. Morgagni (1682-1771) was the father of modern pathology. Through post-mortems he discovered the causes of many diseases. He insisted upon tracing diseases back to their sources, and his "Seats and Causes of Diseases" was an epoch making work in his field. He established the location and cause of apoplexy, gave a description of heart-block, and identified the clinical features of pneumonia with solidification of the lungs. The study of pathology from the standpoint of the tissues was introduced by Bichat. No mention can be made of the history of medicine without including the name of Edward Jenner, who in 1796 introduced preventive inoculation.

With the nineteenth century, we reach the beginnings of the organized advancement of science. In this century it is hard to do justice to all the worthies. Due to the limited time given for this paper, no attempt will be made to exhaust the material, but only the highest of the high spots will be touched. Modern dermatology comes from

the work of Willan. The names of Johannes Muller and Claude Bernard will forever be attached to important advances made in the study of the function of the nervous system. Both were outstanding physiologists of their time. In this century memorable advances were made in a number of fields. The name of Virchow is connected with the rise of medicine through his work in circular pathology. Surgery received a lasting boon from Semmelweis who discovered that puereral fever could be carried from patient to patient. He developed a very simple prophylaxis which greatly reduced the mortality rate. The laryngoscope was developed by Manuel Garcia a music master. Von Helmholtz accidentally discovered the ophthalmoscope. Roentgen in 1895 discovered that the rays of Crookes penetrated solid matter and modern medicine was given its invaluable x-ray. In the field of surgery important advances were made. By means of elimination, Lister came upon carbolic acid, and working upon Pasteur's theory gave an antiseptic to medicine. To Lister is due the many developments in surgery of hollow cavities, cranium, chest, abdomen, and male and female pelvic viscera. The Chamberlen secret of obstetrical forceps held secret so long was finally revealed in the University of Amsterdam. McDowell (1770-1830) performed the first abdominal operation of the kind called ovariectomy, and shattered the tradition that the adominal region could not be entered successfully. McBurney of New York gave the greatest advance to diagnosis for appendicitis by establishing the so-called "McBurney's point" at which acute pain and tenderness are concentrated in appendicitis. Thomas Young laid the foundation of physiologic optics and was the first to describe astigmatism. Sir Victor Horsley, and Harvey Cushing performed the first successful brain operations. In the field of bacteriology the advances made constitute one of the chief victories of the century. Pasteur stated the germ theory of disease. Koch proved it. The tuberculosis germ was discovered by Koch, and Pasteur did his epoch making work in hydrophobia. Gaffky and Ebert are largely responsible for the conquest of typhoid fever. In 1896 Wright perfected an inoculation against the dreaded disease. Loeffler and Klebs pointed the way to the victory over diphtheria, and Behring gave the world the diphtheria antitoxin. Theobald Smith established the theory that insects carry disease. The bacillus of the bubonic plague and its carrier the rat were discovered by Yersin and Kitasato. David Bruce found the specific germ of Malta fever carried by the Tsetse fly. Laveran in 1880 and Ross in 1897 discovered the malaria parasite and the agent—the mosquito. The victory over yellow fever was due to Walter Reed and his dangerous experiments. Few advances have been as welcomed by the public as that made in anaesthesia. As early as

2000 B.C. mandragora was used by the Babylonians, but the foundation of the modern practice is due to Priestly's discovery in 1767 of the method of liberating and collecting gases and his discovery of nitrous oxide, in 1776. The principle of general anaesthesia was established by Dr. Wells in 1844. In 1846 T. G. Morton used ether on himself and found it excellent for its purpose. In the same year it was first used in an operation. Chloroform used in an operation first by J. Y. Simpson, was suggested by Waldie in 1847. This brief summary of the work of the nineteenth century only suggests the wide range of advances made. It does not do full justice to those to whom credit is due.

When we come to our century we are bewildered with the many and important advances made. Only a few of them can be selected for attention. In 1917 Von Wagner Jourag discovered a treatment for general paresis in the injection of malaria, which destroys the spirochete. Schaudinn discovered spirillum responsible for syphilis. Paul Ehrlich after 606 experiments discovered salvarsan as a cure for the dreaded disease. One of the most famous names in connection with syphilis is that of Wassermann who gave the world a method of detecting it. Spinal anaesthesia was discovered in 1909 by Doctor Jonnesco, a Roumanian. Local anaesthesia has been a development of the last twenty years, especially the practice of blocking nerves by injections of novocaine. The whole field of the relationship between health and food has been developed within our lifetime. Trachoma organism was isolated by Noguchi in 1927. As a result of investigations made at the University of Rochester, Doctors Minot and Murphy in 1920 stated that practically all patients of pernicious anemia were benefitted by the addition of mammalian liver to their diets. Recently, Calmette and Guérin have cultivated a tuberculosis germ, and have concluded that inoculation does protect the patient exposed to the disease from contracting it. Of 982 babies treated who lived in a tuberculosis environment, only 190 died of the disease, while 30 percent to 70 percent of untreated infants died. Pellagra is now subject to cure by the use of the recently discovered vitamin-P-P. Dr. Jean V. Cooke of Washington University has perfected a vaccination for chicken-pox and another for measles. Leland B. Alford by an injection of glucose caused a decided improvement in cases of sleeping sickness. (1926).

Erysipelas was conquered by Konrad Birkhang of Rochester when he recently developed an antitoxin treatment. For many years Doctors George and Gladys Dick worked to find the germ of scarlet fever. At last in 1923 the causative germ was isolated and identified. In 1924 an antitoxin was manufactured. In 1925 Prof. Collip of the University of Alberta discovered that an injection

on an extract from the parathyroid gland caused the amount of calcium and phosphate in the blood serum to rise, and in the cases where bones are broken, causes the bones to heal much more rapidly than would otherwise be possible, and the discovery of insulin by Doctor Banting has added years to the lives of diabetic patients.

A record of achievement! No progress in any line of human endeavor can in any sense equal in human benefit the progress of medicine—and may this progress continue.

MODERN METHODS OF PREOPERATIVE AND POSTOPERATIVE TREATMENT*

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The object of medicine and of surgery is to save human lives and to relieve suffering. This effort appears obviously commendable, yet there are features of it which admit of discussion.

The prolongation of human life seems to be generally accepted as an unmixed blessing. While the lengthening of life and the relief of suffering are admirable endeavors, the medical profession generally, and surgeons to a marked degree, have still another opportunity and obligation, the responsibility for which they cannot fully escape. What is to be done with the life that has been prolonged? There are doubtless many communities containing a few individuals the shortening of whose lives would be a distinct civic asset. The indiscriminate prolongation of life cannot be said to be without its disadvantages.

The preoperative and postoperative treatment has certain psychological aspects. While the general practitioner, the psychologist and the neurologist come in intimate daily contact with patients, the surgeon often meets his patient at a great crisis. In undergoing a test of courage in submitting to the operation, and in the reaction of recovery, the patient's mind is doubtless more plastic than at any other stage in his adult career. It is at such times that an opportunity is open to the surgeon of doing more than merely building up the physical structure.

A specialist who is content solely with repairing that particular line of pathologic disarrangement which happens to fall strictly within his specialty often loses the advantages of a broad outlook on disease and on human conduct. To restore vision, to remove a crippling deformity, to relieve pain, are beautiful; but there should also be some interest in endeavoring to give courage and a better outlook on life. The most inspiring thing is not necessarily the formal printed or spoken word, but conduct. I have been helped more by observing patients who were suffering

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from diseases that they knew were hopeless and yet were cheerful and unselfish than by any sermon or essay. It is often the privilege of the surgeon in his contact at the time of the patient's mental stress and strain before and after an operation so to influence him, possibly by little suggestions or by sympathetic interest, as to raise his ideals or in some way to make his outlook on life better than it was before. This may be just as important as the management of the physical welfare of a patient.

It is becoming more and more evident that the modern surgeon must not be satisfied by technical proficiency alone, highly important though it is. He must think in terms not only of anatomy and mechanics, but of psychology, physiology and pathology. The general preparation of the patient for a major surgical operation involves inducing as calm a mental state as possible. It is much more difficult to take advice than to give it, and few individuals can approach a major operation without some qualms and anxieties. These apprehensions may often be allayed by frank talks if the patient is intelligent and wishes to discuss the situation. If the patient does not desire to hear about details of his disease or the treatment he should not be filled with unwelcomed facts. Whatever is told, however, should be consistent with the truth. This not only creates at the time more confidence in the surgeon and his profession, but gains more respect afterwards from the patient and from the patient's family and friends.

The preliminary examination of the patient for any major surgical operation should always include a study of the heart, the lungs and the function of the kidneys. This is done by an internist unless the surgeon is one of those rare individuals who has kept up with internal medicine as well as with surgery. Usually the surgeon can be more profitably occupied in making a careful surgical examination and in spending his additional time on the pathology of the tissues and in experimental work. One man cannot be truly proficient in every branch of medicine.

The old criticism of an operation being beautiful but the patient having died, has in it some cynical philosophy that we cannot afford to neglect. Surgery is safer now than it was a few decades ago, but this is due not so much to technical operative improvements as to a broader conception of the biologic features that concern the patient and an adaptation of them to the preliminary treatment and the after-treatment. An operation for exophthalmic goiter from a purely technical and anatomical standpoint is no better now than it was twenty-five years ago. In fact, the older operation with a wide dissection, demonstrating the deep vessels and nerves in the neck, was technically more beautiful than the modern operation. Now much of the posterior portion of

the thyroid gland is left, there is no attempt to demonstrate the recurrent laryngeal nerves, and the operation is completed with reasonable speed and without undue trauma. After the operation of former years, however, without any particular preliminary or postoperative treatment, the mortality rate was from 35 to 40 percent, whereas, now, with what might be called a comparatively sloppy operation but with the proper preliminary and postoperative treatment, the mortality has fallen to 2 or 3 percent, and in some clinics it is even lower. Advances in thyroid surgery have come not by continuous improvement, but, as is usual, by careful clinical observation combined with laboratory research, the abandonment of hypotheses proved to be fallacious, and finally by combining the many different factors that seem to increase the safety for the patient.

Observation of the deleterious effect of fright and excitement in exophthalmic goiter and attempts to abolish these emotions, as emphasized by Crile, were the first steps of improvement in the preoperative treatment of this disease. Then the making of as little raw surface as possible, the gentle handling of tissues, the absence of a profound anesthesia, an abundance of oxygen for the tissues, the administration of iodine both before and after the operation, the treatment of hyperpyrexia by ice bags, and the intravenous administration of dextrose as a buffer for the excessive metabolism, have all had a part in this improvement. The operative technic has become anatomically less admirable, but better preoperative and postoperative treatment have been instituted and the mortality rate has thereby been greatly lowered.

To a lesser extent something of this kind holds true in all operations. Twenty-five years ago it was the common custom in preoperative treatment to purge patients with large doses of castor oil, sending them to the operating room dehydrated and exhausted. Physiologic reflection should have shown that this was incorrect. Patients need more water and more of the electrolytes during and following an operation than in normal health, so the administration of these substances instead of depleting the patient of them is indicated.

Rest in bed for at least one or two days before any major operation that is not an emergency is important. This not only accustoms the patient to bed, but tends to rest the heart, lungs and kidneys. Patients over fifty years of age may do better if they are digitalized before a major operation. The integrity of the heart is often difficult to estimate, but its function under exercise and the relation of function to pulse rate and blood pressure usually will give a reasonably accurate idea of its condition.

All therapy may be classed roughly under two "r's", rest and resistance. Hilton's classical work

on "Rest and Pain" outlines principles that are just as true today as when they were written sixty-nine years ago. Rest includes not only the general rest of the body but physiologic rest of special tissues or organs, which means the total or partial abolition of their function. Building up of resistance is accomplished in many direct or indirect ways. The removal of a gangrenous appendix may be cited as an indirect building up of resistance against bacteria by removing the source of infection and so abolishing the pathologic organisms it contained. In the same way a radical operation for cancer of the breast may be counted as increasing general resistance by removing an enemy of the tissues, for resistance after all is a relative thing and must be considered not only in regard to the quantity and quality of the resistance but the quantity and quality of the enemy. Other methods of building up resistance of a more positive kind would be the administration of serums or vaccines, the regulation of diet, and the increase of blood by transfusion. Sometimes these two indications for rest and resistance conflict. Nourishment should often be temporarily dispensed with in order to secure rest of the gastrointestinal tract. It is unwise to give food to a stomach that has just been operated upon and has thus been for a while crippled in its function. If, however, the calories can be supplied in another way without causing activity of the stomach, as by continuous intravenous administration of dextrose in Ringer's solution, this method of nourishment may be adopted advantageously.

Formerly, patients with what we now term massive collapse of the lungs have perished because of the lack of a change of position, of a good spanking, or something that would deepen inspiration and facilitate pulmonary drainage. The recommendation of Yandell Henderson and his associates to give oxygen and carbon dioxide after a prolonged anesthetic in order to prevent massive collapse by thoroughly ventilating the lungs is founded on the physiologic observation of the action of carbon dioxide as a respiratory stimulant, and is an excellent practice. The treatment of this complication by these measures is also indicated.

One of the essential elements to health is water. We can add to this calories and salt and make the combination still more effective. Transfusion of blood is often obviously helpful, but giving intravenously water and the salt elements of the serum, such as is in Ringer's solution, sodium chloride, potassium chloride and calcium chloride, with dextrose, seems to be an ideal combination and frequently substitutes for a transfusion. Matas has shown that the continuous intravenous administration of 5 percent dextrose solution may sometimes be kept up for several days with great benefit. He originally employed it as a drop method like the

so-called Murphy drip. We have modified this by using a smaller narrow burette graduated so that 100 c.c. of the solution fills 9.2 cm. of the length of the burette. In this way the rate of flow can be fairly accurately determined and the danger of the entrance of air into the vein is obviated. Dextrose solution appears to stay in the vascular lumen longer than simple salt solution. In shock and low blood pressure, it is run in rapidly, 500 c.c. or more an hour, until the blood pressure comes up to a satisfactory level, then the rate of flow should be diminished. After each 500 c.c. a small amount of insulin, 12 to 15 units, about half the amount necessary for the dextrose, is administered, injecting it directly into the tube as the solution is flowing. We find this is better than giving a larger amount of insulin because the body tissues will take care of much of the dextrose. In cases of sepsis or lack of nutrition the administration should be slow, but continued over several days. Thus, after a partial gastrectomy it may be given intravenously for two days at the rate of about 100 c.c. an hour. It is a good remedy in the vomiting of acidosis. When there is a marked loss of fluid as from vomiting or from a fecal fistula, more of the solution can be given than under other conditions in which there is no abnormal loss of fluids. When there is no vomiting and the patient is thin and the blood pressure normal or elevated it should be discontinued after twenty-four hours unless some special indication for it exists. After operations for hyperthyroidism this solution is excellent and acts as a buffer, the stimulating metabolism having the dextrose to burn instead of the tissues.

It must be recalled that dextrose is a normal constituent of the blood, there being about 0.1 to 0.2 percent of dextrose in the blood serum. A stronger solution than 5 percent is not necessary unless there is a degree of urgency for more as in marked acidosis. The dextrose should be pure, preferably that put up in ampules, else reactions may occur. The water is freshly distilled and tablets for Ringer's solution are added, then the ampule is opened and dextrose poured in. The cannula is removed from the vein in two or three days, and if it is necessary to give more of the solution after a discontinuance of it, another vein is used. Sometimes, vomiting of clear or bile-tinged fluid occurs after a continuous administration for two days. This may be an early symptom of "water sickness" and ceases when the intravenous administration is discontinued.

Another valuable suggestion of Matas for after treatment in some operations upon the gastrointestinal tract is the use of a duodenal tube inserted through the nostril into the stomach and permitted to remain. In dilatation of the stomach or in toxic conditions when there is vomiting, an apparent effort at excretion by the gastric mucosa,

the stomach can be drained and frequently washed out with a small amount of soda solution without inconvenience to the patient. Later, nutrition may be administered through the tube. In a case of duodenal fistula following an extensive gastrectomy in which there was infiltration about the pancreas and duodenum, I have had the fluid from the fistula injected through a long Jutte tube that reached through the nose and stomach well into the jejunum.

It has been shown by Waltman Walters that the loss of pancreatic secretion is almost as quickly fatal in a dog as an upper intestinal obstruction would be. This is quite different from the loss of bile from the gall-bladder. Bile can be drained externally almost with impunity for weeks or even for months, though not indefinitely; but the loss of all pancreatic juice is quickly fatal. In a duodenal fistula when there is great loss of pancreatic juice, an oblique jejunostomy with a tube, after the technic of Coffey or of Wetzell, and injecting the duodenal fluids into the tube is an excellent practice employed by many surgeons. This can be continued until the patient recovers sufficiently for the fistulous tract to close.

The knowledge of the physiology of the stomach and intestines has been greatly extended by the work of Pavlov, Cannon, Carlson, Luckhardt, Alvarez, Klein and others, and points the way to the proper filling of many indications in the postoperative treatment of gastro-intestinal cases.

The possibility of reducing the virulence of bacteria in the intestine by diet, such as the avoidance of proteins, the increase of carbohydrates and an abundance of water, is of great importance in surgery of the colon, not only as a preliminary preparation but as postoperative treatment until the tissues have well healed. In achlorhydria bacteria in the stomach and intestines develop freely. The administration of hydrochloric acid in such a condition simulates the normal antiseptic action of gastric juice and is a great aid in reducing the incidence of sepsis subsequent to gastric and intestinal surgery.

The point at which rest of a tissue should give way to action often is difficult to decide. The work of Harvey, of Yale, Carrel and others has thrown much light upon the healing of tissues and the strength of the wound and the sutures. There comes a time at which healing is sufficiently strong to resume activity. Ordinarily a muscle-splitting incision, where the fibers were not cut across, will permit of function earlier than a long incision with some of the fibers divided. But tissues are no stronger after an operation done by one surgeon than after a similar operation by another surgeon, and it would seem the part of wisdom to allow sufficient healing and strength before the strain on the abdominal muscles is gradually re-

sumed. This can hardly be expected without at least ten or twelve days in bed. In the longer incisions a longer rest is necessary.

Deep breathing, sunlight, proper diet and rest when the patient is tired are trite things but are necessary in all after-treatment, particularly after abdominal surgery.

CONCLUSION

Improvement in preoperative and postoperative treatment consists not so much in laying down hard and fast rules and empirical details as in applying broad biologic principles and, like Whistler said of his paints, mixing them with brains.

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THE VALUE OF THE FAHRAEUS REACTION IN GYNECOLOGY*

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TERRE HAUTE

So familiar are we with the thermometer and the hemacytometer that few of us realize the knowledge of the phenomenon of sedimentation of blood almost equals in antiquity the recognition of fever and far antedates the discovery of leucocytosis.

History—Galen 1700 years ago first experimented and found that blood separated into two layers if allowed to stand in a tube or vessel and applied the term "crusta phlogistica" to the clear layer of plasma or serum after settling of the cellular elements.

In 1597, nearly fourteen hundred years later, Galileo invented the thermometer; but there was no accurate way of recording body temperature until Fahrenheit in 1714 stabilized the thermometric scale by using mercury, taking the melting point of ice and the boiling point of water as the fixed points, so establishing the normal body temperature of 98.4 by the Fahrenheit scale.

The discovery of leucocytosis by Virchow, and the increase of the polynuclear neutrophils by Metchnikoff as active agents against the invasion of the human body by micro-organisms occurred less than one hundred years ago, yet we have both of these clinical aids accepted and used daily long before the earlier discovered blood sedimentation, which, in our opinion, is as important and is a

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more constantly dependable guide than temperature and leucocytosis, in many conditions.

The crusta phlogistica of Galen seems to have been lost sight of as no mention is made in literature until 1791, when John Hunter mentions the phenomenon as occurring, and noted the rate of separation varied in different specimens of human blood and in different species of animals.

Further careful studies were made by several workers between 1845 and 1870 and again in 1894 by Biernacki of Warsaw.

So we have had the knowledge of this important clinical aid for 1700 years, but were unable to make any practical application of it until in 1917 when Fahraeus rediscovered the reaction, using sodium citrate as an anticoagulant, and found that if blood so treated is allowed to stand in a tube, the erythrocytes settle to the bottom, leaving a clear, well-defined supernatant layer of plasma. The reaction was studied by Fahraeus at first with the idea of diagnosing early pregnancy, but later it was applied by him and others to all gynecological conditions. It was also found that the sedimentation velocity was influenced by other bodily conditions of which mention is made later. The variation in rate of this sedimentation according to the patient's condition constitutes the basis for a diagnostic and prognostic test.

Technique—An intelligent comparison of the results obtained is difficult, and leads only to confusion, since various workers have used different methods and recorded their results in different units. Practically all, however, have found it of clinical value.

Many different techniques have been advanced, but all are variations based on three fundamental types; 1st, the Linzenmeier, or time method, noting the time required for the red cells to settle a given distance; 2nd, the Westergreen, or distance method, noting the distance traveled by the erythrocytes in a given time; 3rd, the Graphic method in which both time and distance are noted and a chart made showing graphic curves.

A new method has recently been devised in which heparin is employed as the anticoagulant, and the results expressed in terms of percentages of total possible settling which occurs in the observation period of one hour, the total possible settling being determined by centrifugalization.

The authors state, heparin is used as the anticoagulant because they have shown that it does not affect the settling rate or the cell volume in any concentration which might reasonably be used to prevent coagulation. The inorganic anticoagulants usually employed retard the sinking of the cells in proportion to their concentration, and the fluid introduced actually dilutes the plasma, the amount of which in a given specimen of blood is unknown when the dilution is made unless a preliminary hematocrit is done. We use

sodium citrate as the anticoagulant, and for practical results have found no occasion to complain.

The first method has proved as accurate and probably most popular and is embodied in the Linzenmeier-Friedlander method. In this method, 1 cc. of a mixture of blood (4 parts) and 5 percent sodium citrate solution (1 part) is allowed to settle in a tube 6.5 cm. long and 0.5 cm. in diameter, calibrated at 1 cc. with marks at levels of 6, 12, 18 and 24 mm. below the 1cc mark. In ordinary practice, the sedimentation time is taken as the number of minutes required for the red cells to settle from the 1 cc. mark to the 18 mm. mark. The other graduations can be used to obtain curves of acceleration, etc., but do not seem to be used by most of the workers. We find it convenient to draw 1.2 cc. of blood by venepuncture into a syringe containing 0.3 cc. of 5 percent sodium citrate solution, thus bringing the total volume to 1.5 cc. and allowing a small excess over the 1 cc. actually required in the test. The syringe should be inverted slowly to insure even mixture before placing the blood in the sedimentation tube. Exactly 1 cc. is placed in the tube, and after the test has started, the tube must be kept vertical, as any deviation toward the horizontal increases the velocity of sedimentation. The test is conducted at room temperature. Some insist on the ice box method at 6° C. as they claim temperatures above 18° C. show increased rapidity of sedimentation. One author says the test should be done in the morning on an empty stomach, but we have not found, in the ordinary case, that diet or average temperature have any appreciable influence on the rate. The syringe and tube must both be clean and quite dry before use. An alternate method is to place 0.2 cc. of 5 percent sodium citrate solution in the graduated tube and then add 0.8 cc. of blood. The tube is then inverted a few times to mix the contents.

Theory—The exact mechanism of the phenomenon is not fully understood and several theories are extant, although the electronic theory is the most generally accepted. It assumes that the velocity of sedimentation depends on the number of negative electrical charges carried by the red blood cell. When these are neutralized by positively charged blood elements (such as agglutinins and perhaps globulins), the erythrocytes repel each other less. Rouleau formation then occurs with resulting increase in sedimentation velocity.

Applicability—In normal women, free of any type of infection, the sedimentation rate is over 180 minutes. In the general field of medicine, numerous examples of acceleration and a few instances of retardation of the rate are found in different conditions, both pathological and physiological. Diet, exercise and heat have some, x-ray and radium, more influence, but not to the profound degree shown by inflammation and infection of various types, nor by acute, severe

hemorrhage, anemia, and middle and late pregnancy, all of which cause acceleration. The most notable examples of retardation occur in liver affections (with or without jaundice) and asphyxia from tracheal stenosis (experimental). While this paper is limited to a discussion of Fahraeus' reaction in relation to gynecology, it is well to call attention to the fact that a great deal of work has been done with the test in a host of conditions, including tuberculosis, arthritis, neurological and psychological conditions, and many acute infectious diseases, the summation of experience being that any marked acceleration of the sedimentation rate means active infection or malignancy. In cases of infection, the rate increases in rapidity in direct proportion to the virulence and spread of the infection.

The clinical value of the sedimentation reaction depends upon its frequent repetition. The momentary condition of each patient agrees better with the sedimentation reaction than with the temperature or leucocyte count, both of which are frequently within normal limits in the presence of considerable tissue destruction.

It is a fine quantitative measure of the change in the blood produced by a destructive process somewhere in the body. It does not diagnose nor does it localize the infection. It does not indicate the state of the diseased organ, but it does reflect the disturbance produced in the organism through the absorption of products of infection. Our experience coincides closely with that of others in the working rule that virulent infection will not be found in cases where the sedimentation rate is over 60 minutes. In gynecological practice, at least, the reaction can be used as an index of prognosis in cases of inflammatory process to decide the time for operation.

As examples of the striking variation in the sedimentation rate, we quote the following table from Baer and Reis, who reported on work done at the Michael Reese Hospital. These figures represent average values for a series of 550 cases, and are in close agreement with other authors:

	Minutes
Puerperal sepsis	15
Acute salpingitis	21
Late carcinoma	22
Infected and septic abortion	26
Pyelitis	32
Subacute salpingitis	50
Early carcinoma	61
Threatened abortion	65
Incomplete abortion	78
Bartholinitis	88
Chronic salpingitis	108
Ovarian cysts	124)
Polyps	125)
Endocervicitis	126)
Fibroids	146)
Fibrosis	140)

Ectopic pregnancy	148)
Ectopic ruptured	85
Retroversion	146
Normal	184

The pronounced influence of infection is most apparent from the above table.

In Pregnancy—In the case of early pregnancy, the test is of no value in diagnosis, as the sedimentation rate is practically normal. Beginning in the second trimester there is a noticeable acceleration, so that by the end of the ninth month it is 70 minutes. At the beginning of the first stage of labor, the sedimentation rate is 50-60 minutes. The acceleration continues during labor and into the puerperium, and on the fifth to the ninth day attains its maximum velocity, 10-20 minutes, returning to normal in five to seven weeks post partum. It is to be understood that these figures are average values, but were found to obtain in over 80 percent of two series of cases studied with great care by H. O. Neumann, using 450 cases in one series and 200 in another. Diseases such as lues, nephropathia gravidarum and eclampsia were seen to have no influence on the normal change in sedimentation rate during pregnancy, but in serious diseases or anemia during the puerperium, there is a great delay in the return of the sedimentation rate to normal. Says this author, "A pronounced parallelism exists between the sedimentation reaction and the clinical processes of involution".

Prognosis and Diagnosis—There are still a few surgeons who through bravado, ignorance or misguided enthusiasm operate on gynecological infections in the acute stage. The vast majority are becoming more and more conservative, and not only postponing the time of operation, and conserving all possible organs, but through their conservation are making unnecessary many mutilating operations by curing their patients without surgery.

Today, the avoidance of subjecting the acutely infected pelvis to surgery is an almost universally accepted axiom, the reasons for which were, a few years ago, succinctly and briefly stated by Polak, as follows: "Only a comparatively few years have elapsed since the surgeon has realized the difference between the peritonitis following a ruptured appendix or duodenal ulcer, and the peritoneal reaction which takes place as an extension of tubal inflammation or a pelvic infection. In the former the content of the intestine is suddenly emptied into an unprepared peritoneal sac, with insufficient time for localization. In the pelvis it is but an extension of the tubal inflammation and already adhesions of the contiguous viscera have occurred, which thus localize the process within the pelvis. In the former, surgical intervention may remove the cause, and by proper drainage localize the peritoneal reaction; while in the lat-

ter protective adhesions having already formed, will be broken up and the infection spread.

"Early operation of any acute pelvic inflammation is contraindicated, first, because the patient may recover under palliative treatment; second, because collections of pus in the pelvis become less virulent or sterile, if sufficient time is allowed for the process to become quiescent."

He also said, "All acute symptoms must have subsided and morning and evening temperatures be normal for a period of at least three weeks. The leucocyte count should never be over eleven thousand, nor the polymorphonuclear percentage over seventy-five, at the time of making an abdominal section for tubal inflammatory disease."

That the sedimentation test has proved to be of value in determining with even greater accuracy than the temperature and leucocyte count the moment when the patient's resistance to a known infection has increased to the point of safety for operative interference, has been repeatedly emphasized by workers in this field. The usual method of depending upon falling temperature and leucocyte count has been disappointing to all of us. Who of us has not entered an infected pelvis under such guidance and been disappointed to find active inflammation, and have our patient make a stormy convalescence, or worse, have a fatal termination?

If the patient's temperature and leucocyte count remain normal, pain and tenderness subside, but sedimentation velocity remains rapid, it is much better to send the patient home to remain in bed for a month, or more, if necessary, until the sedimentation rate has become 60 minutes or more.

Unquestionably, one must exercise judgment when using this test, the same as with any laboratory method. We are frequently too prone to allow the laboratory to make or settle diagnosis for us. It has been said time and again, when in doubt, if there is a difference between the laboratory and the clinical diagnosis, to take the clinical; so should we bear in mind that this is a laboratory test.

If we but realize that the sedimentation rate is a much more reliable index than temperature or leucocyte count, of the activity, attenuation and disappearance of pathogenic bacteria, or the virulence and spread of infection, we are then in a position to accept this test at its full value and give it the importance it deserves as a diagnostic and prognostic procedure. It is also of considerable use in differential diagnosis. For instance, in the case of simple fibromyoma, or in fibrosis, the sedimentation rate is 140-150 minutes, in incomplete or threatened abortion, 65-80 minutes, and in carcinoma, 60 minutes, or even less. All of these conditions can give rise to vaginal hemorrhage, often with a confusing history. Again, in the case of a question of tubal preg-

nancy versus acute salpingitis, particularly with pain, no fever and indefinite leucocytosis, the sedimentation reaction is of value, since in salpingitis the rate is 30-40 minutes, while in ectopic gestation it is 140 minutes or longer. Even in ruptured tubal pregnancy, while the diagnosis usually can be made clinically, the sedimentation rate may attain a velocity of 60 minutes, which is definitely faster than in the unruptured case, but still distinctly slower than in acute adnexal infection, and thus occasionally may be welcomed as a confirmatory finding. H. Falta states that in acute appendicitis of not more than thirty hours' duration, there is little or no effect on the sedimentation rate, while in acute salpingitis of equally short duration, a prompt acceleration in the sedimentation is seen. This observation has been confirmed by our work also.

Personal Experience—Although our use of this test has not been extensive, we have tried it more than one hundred times, and find it coincides closely with the reported results of others. We feel justified in presenting our experience. We are using it not only in our hospital cases, but also in ambulatory cases at the clinic in gynecological or suspected gynecological conditions, and have become convinced it is a valuable diagnostic and prognostic aid. We use it routinely in all preoperative work each time along with complete blood counts, but have not followed up the cases postoperatively to determine the time of return to normal.

In numerous instances it has proved a reliable index of virulence and extension of infection, and a dependable aid as to time for operation. In case No. 35792, but recently, of acute unilateral salpingitis, the temperature and leucocyte count had become normal for several days, the sedimentation velocity reduced to 60 minutes, and the operation scheduled for the following morning. The patient was seen just preceding the operation and found to be complaining of slight pain on the right, or opposite side. The temperature was still normal, but another sedimentation was done, and the rate found to be 28 minutes. The operation was postponed, and the patient went through a typical acute exacerbation with accompanying fever and increased white count. She was held until temperature, pulse and leucocyte count were normal, and the sedimentation rate reduced to 45 minutes.

We decided to test the reliability of the sedimentation reaction and operated upon the case, and became convinced of its accuracy and dependability, as we found the pelvis still in an active condition, though not acute. Had we ignored entirely the increased sedimentation rate, we would have entered a pelvis in the midst of a red hot, spreading infection.

Exceptions—There are probably several circumstances under which one is justified in ignor-

ing a rapid sedimentation, aside from the idiosyncratic cases, in the same way one ignores a negative Wassermann at times.

There are two types of cases which stand out prominently in our minds where the sedimentation rate should be ignored after a reasonable period. The first is the type in which the patient shows definite improvement in every way, yet the sedimentation rate persists in remaining between 40 and 60 minutes. The second type is the one in which the patient is showing more and more the effects of infection, and one can locate and quickly drain an abscess. This should preferably be done by posterior colpotomy, if at all possible.

As illustration, I report briefly two cases of the first type and one of the second type.

Case No. 37072 in spite of temperature and leucocyte count remaining normal for a number of days, the sedimentation rate persisted in remaining below 50 minutes. The general condition of the patient was so improved that we decided upon operation. Since the mass lay quite high, we felt we could not reach it through the cul-de-sac, so decided upon laparotomy. We found a tubo-ovarian abscess completely walled off which was easily removed without rupture.

The second case No. 38290 behaved very peculiarly in our opinion. The patient had fibromyoma. Her temperature and leucocyte count were normal and sedimentation was 11 minutes. Thinking there was some error in technique, the test was repeated, and again showed 11 minutes. The pelvis did not show any inflammatory processes. The general condition of the patient was apparently good, and not finding any pathology outside the pelvis to account for the rapid rate, we decided to operate upon her in the face of this warning. A subtotal hysterectomy was done on the second day. The pathological report was as follows: "Uterus three times its normal size. One myoma 4 x 5 cm. and several smaller ones. The largest myoma showed marked degeneration and contained 30 cc. of pus. In one cornu of the uterus, there was a three months' fetus. There was no evidence of malignancy."

The pregnancy in this case, unsuspected, undiagnosed, was in the first trimester and so had no influence on the rate. The myoma containing pus was undergoing active degeneration, containing pathogenic bacteria. The resistance of the patient had been sufficiently built up so there was no rise of temperature nor increased leucocyte count, yet the process was highly active, giving a rate of 11 minutes, the only positive sign of an acute process.

As an example of the second type, Case No. 38093, following a normal labor, developed a pelvic infection. Temperature and leucocyte count ran fairly high, and sedimentation rate 24 minutes. Patient was extremely ill and had been for two weeks before being sent into the hospital.

The usual treatment in such cases was used, and temperature and leucocyte count reduced, but the sedimentation rate showed very little variation. During the next two or three weeks, the temperature remained about 100 and the white count normal, or only slightly increased at times, and the sedimentation rate still below 30 minutes. The patient was showing marked effects of the continued absorption of infection, and, even though there was no marked bulging in the cul-de-sac, and no point of softening, we decided to make an attempt to open into some pus. We were successful, and even though we did not get large quantities of pus, the patient began to show almost immediate satisfactory results, and left the hospital in about two weeks.

I report these cases with the idea in mind to further emphasize the point brought out earlier in the paper, that sedimentation is a laboratory test, must be considered as one, and that the surgeon must at all times remember he is a clinician and use all these aids and all his knowledge in arriving at conclusions as to the best procedure for the welfare of his patient.

By using the sedimentation rate as an index, taking 45 minutes as the minimum time of sedimentation at which to operate in cases that are slipping, and 60 minutes or over as the time to operate for a safe afebrile convalescence, the mortality and morbidity rate will both be lowered.

I do not include posterior colpotomy in the above rule. Evacuation of pus through the cul-de-sac should always be done whenever its presence is demonstrated regardless of temperature, leucocyte count or sedimentation rate.

Although some may feel that this test is still in the experimental or investigative stage, we, and many others, contend that the work already done shows results too consistent to be passed over lightly. In addition, the reaction is inherently suitable for clinical use for two reasons, (1) it is an extremely simple procedure, and (2) the difference in the readings between normal and pathological values is so great that a doubtful result is seldom seen. With these points in mind, it would seem uncommonly worthwhile to give such a test a fair trial, and while further experience may limit its field of usefulness even more than we have outlined, we feel it is an aid which we cannot afford to ignore.

CONCLUSIONS

1. The blood sedimentation test is a much more reliable index of the presence or absence of infection than temperature or leucocyte count.
2. A sedimentation rate of less than 60 minutes is indicative of active infection.
3. A sedimentation rate of 120 minutes or more precludes the probability of infection.
4. The sedimentation rate is the most constantly accurate aid in determining the safe time for operation in pelvic infection.

DISCUSSION

W. N. ROWLEY, M.D. (Kokomo): Dr. Weinstein's paper has been most interesting and valuable. He brings before our attention a somewhat neglected test. Perhaps the reason for this neglect deserves attention. Laboratory procedures have been so numerous that only those of specific application have found a place in the routine of diagnosis.

The sedimentation test does not have a specific diagnostic place. Its greatest value to my mind is in prognosis. The balance of power is the only factor between recovery and death. If the disease holds this balance of power we have a fatal issue while recovery comes where the combative forces of the body hold the balance of power.

The sedimentation test is most valuable in determining this fact. The diagnosis is made by clinical findings, the sedimentation test tells us which of the two factors, disease or resistance, has the upper hand.

Dr. Weinstein speaks of pelvic infections in general terms. I wish to call attention to a specific type of pelvic infection in which the sedimentation test is of greatest value. This is the condition spoken of as para-metritis. In this type of pelvic inflammation we are dealing with a lymphatic infection of the pelvic tissue of streptococcus origin. Here it is that the balance of power must be well on the side of resistance or else interference of a surgical nature will be fraught with danger and often death. Venereal infections of the pelvis are not of particular danger so long as they remain endo-thelial in extent; when they become complicated by a secondary para-metritis we have the same condition to face as in the primary parametrial disease. In determining the relative virulence of the organism and the associated resistance the sedimentation test is of real value. Whenever we see a rapid sedimentation in the blood we see a clinical condition of toxemia with disturbance of the chemico-electro balance of the normal mechanism of bodily resistance to bacterial toxins. To have some index of the degree of this imbalance through the sedimentation test is of value. Its limited value, and because we have so much obvious clinical data to work with, without this test, is perhaps one reason why it has not found a more general usage.

Dr. Weinstein has again called our attention to its value. This is timely and should lead to further accumulation of data in order that its field of usefulness can be established and a definite place made for the test.

The cases presented illustrate well the prognostic value of this reaction. By this I mean it told the surgeon to a rather precise degree what he could expect from surgical intervention. This is one of our most difficult problems the solution of which makes or breaks our surgical morale depending upon the accuracy with which we solve.

The pertinent fact which Dr. Weinstein again

mentions is worthy of repetition frequently. That is the dictum so emphatically brought out by Polak. Pelvic infections in the acute stage must wait. Curtis contributed so much to the reason in this work on the bacterial flora of the infected tubes. How many times we see abdomens opened, as emergencies on a diagnosis of acute appendicitis when the etiology is pelvic inflammation in acute exacerbation. Parametritis should be waited up even longer than pyo-salpingitis. Acute exacerbations of a pyo-salpingitis are parametrial invasions by a new organism. These cases should be operated only while quiescent and the sedimentation test will tell you when that period comes. I heartily agree with Dr. Weinstein's attitude in handling pelvic infection and wish to commend him upon an excellent presentation.

CARL HABICH, M.D. (Indianapolis): This seems to be an opportune time for the presentation of this paper calling our attention to this rather important test. Although we are using this test in the Indianapolis hospitals we feel that we are not using it as frequently as we should. It is rather generally agreed by the men from over the country that there is certain value beyond the value of the temperature curve and the leucocyte count in the prognosis of specific cases, although a very few investigators, such as Williams of Philadelphia, attach but little importance to it. His conclusions were as follows: "It does not express the reaction of the body to the disease process nor to the nature of the pathology present. A rapid sedimentation time has not been found to presage any unusual degree of post-operative morbidity. In comparison, the temperature curve and the leucocyte count remain as more stable and reliable indices for diagnosis and prognosis." But in the literature this sort of a report is exceptional.

Possibly one reason that the test is not being used more frequently is that there are various ways of doing it, which tends toward confusion. If we could all adopt this very simple method which Dr. Weinstein has described (and which we have used in Indianapolis) we feel sure that the test would become more popular. Its aid in differential diagnosis is at best very limited. Ecotopics with massive hemorrhage would show a rapid sedimentation time which might prove confusing. Its great value in gynecology seems to be in the streptococcal pelvic infections which are cooling off from their acuteness. We must be much more careful in these cases than in the gonorrheal infections, as the gonococci are rapidly destroyed in a closed cavity, such as a pyosalpinx, whereas the streptococci will live for years. We seem to be getting a little more radical in our gonorrheal cases, operating them earlier and with excellent results, but in the streptococcal or the

mixed infection cases an added guard for the safety of the patient at operation is welcome, and it will tend to make us somewhat more careful with our preoperative diagnoses.

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THE PLACE OF LABORATORY METHODS IN THE DIAGNOSIS AND PROGNOSIS OF PULMONARY TUBERCULOSIS*

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Modern attempts to understand the biological characteristics of, and man's various cellular and chemical reactions to B. tuberculosis have given rise to a type of laboratory study so highly technical that it is utterly staggering to the average physician. A critical contemplation of these trends in research is, of course, impossible to any but the specialist in chemical pathology and hematology. However, qualifying the general subject of tuberculosis laboratory methods with the terms diagnostic and prognostic at once defines a province of utilitarian knowledge well within the ken of any physician willing to devote to it a reasonable modicum of time and attention. The procedures in this category are not numerous. And since anything short of a clear understanding of their place in clinical medicine may lead to either an unwarranted trust in their infallibility or an equally unjustified skepticism as to their having any real value at all, it is the purpose of this paper to discuss briefly modern laboratory methods of proved diagnostic and prognostic value in tuberculosis, and in conclusion to direct especial attention to the value of total and differential blood counts in judging the true clinical status of certain patients.

DEMONSTRATION OF THE TUBERCLE BACILLUS
I In Sputum

(A) *Specimen preparation*: The fact that a tuberculous suspect does not cough should never mislead one into neglecting sputum examination. Many patients with little or no cough will hawk up in the early morning ("from the throat") a small amount of sputum which the ciliated mucosa of the respiratory tract has propelled up during the night from the alveolar area. This sputum should be collected properly for study. A dry wide-mouthed bottle that has been through clean-

ing solution* is the ideal receptacle. Since cow's milk frequently contains an acid-fast non-pathogen (the harn bacillus), milk bottles should not be used for containers unless they have been especially carefully cleaned. Old vaseline jars should also be avoided in collecting specimens, as traces of petrolatum may render contaminating non-pathogens acid-fast¹.

Caseous or purulent particles from the sputum should be spread upon clean slides for staining; and if these smears are negative a larger sputum volume should be collected and studied according to some concentration method. In the Sunnyside Laboratory the Petroff method (modified by V. Smith) is in routine use: A slightly larger volume of sputum than for direct smear is collected in a clean bottle. This is transferred to a 50 c.c. centrifuge tube containing from two to four times its volume of 3 percent sodium hydroxide (depending on the viscosity of the specimen). After stirring, the mixture stands two to four hours, is diluted with water, and centrifuged at high speed fifteen minutes. After removal of the supernatant fluid the sediment is smeared as before and after the same fixation is ready for staining.

(B) *Staining*: The slide is fixed in flame (two or three passages through: it may feel hot to the hand but should not burn). For three minutes the slide is kept flooded with steaming carbol fuchsin† and is then washed with water, decolorization following with acid-alcohol‡ until washings are a faint pink. The counter stain is with methylene blue§ (0.5 to 1 minute), after which the slide is blotted on filter paper and is ready for examination and Gaffky classification as follows:

- Gaffky I—1-4 bacilli on a slide.
- Gaffky II—average of one in many fields.
- Gaffky III—average of one in a field.
- Gaffky IV—average 2 or 3 in a field.
- Gaffky V—average 4 to 6 in a field.
- Gaffky VI—average of 7 to 12 in a field.
- Gaffky VII—average of 13 to 20 in a field.
- Gaffky VIII—average of about 50 in a field.
- Gaffky IX—average about 100 in a field.
- Gaffky X—enormous numbers.

The bacilli stain, usually a brilliant red, less commonly a reddish violet. It has been the opinion of some that beading, polychromatophilia, wide variation in size, branching, etc., might indicate a highly resistant host. But to date such beliefs are without scientific basis².

*Cleaning solution: Heat potassium bichromate 75 gm. in 200 c.c. water until dissolved and then cool. Then add very slowly concentrated sulfuric acid 400 c.c., stirring gently.
†Carbol Fuchsin: 7.5 gm. basic fuchsin, 75 c.c. 95 percent alcohol, 425 c.c. 5 percent phenol. (Dissolve stain in alcohol and add the phenol solution).
‡Acid Alcohol: 1 c.c. conc. hydrochloric acid, 99 c.c. 70 percent alcohol.
§Methylene blue: Sat. sol. methylene blue 30 c.c., 1-10,000 potassium hydroxide solution 100 c.c., distilled water 75 c.c. (Saturated solution methylene blue: 75 gm. dye in 100 c.c. 95 percent alcohol).

*Third lecture in the Sunnyside Course for Physicians, offered Sept. 12th and 13th, 1929, under the auspices of the Indiana Tuberculosis Association.

It is a mistake to reassure tuberculous suspects or their relatives on the basis of three or four negative sputum examinations. Several years ago I observed a Gaffky IX in the case of a patient whose sputum had for seventy days previous been negative. Subsequent necropsy revealed a well-encapsulated vomica which had finally ruptured into a bronchus. In short, a positive sputum is not a *sine qua non* for diagnosis in the presence of other unequivocal evidence.

For all practical purposes an acid-fast bacillus of *B. tuberculosis* morphology in the hawked or coughed up sputum (not a contamination from the sputum bottle, microscopic slide, or staining rinse water) means tuberculosis. Ozena and very rare suppurative and gangrenous lung conditions are attended by the presence of a non-tuberculous acid-fast organism in the sputum. But the clinical picture in ozena is unmistakable, and in the putrefactive lung conditions the number of these pseudo tubercle bacilli is disproportionate to the extent, degree, and character of the process.

II In Pleural Fluid

The straw-colored clear fluid of pleural effusion contains *B. tuberculosis* in 60 to 70 percent of all cases. The fluid must be thoroughly centrifuged immediately after thoracentesis. The sediment is then spread on an albumen-smeared clean slide, flamed and stained as in the case of sputum. The demonstration of *B. tuberculosis*, or of any other organism, in the frank pus of tuberculous empyema is occasionally difficult. Such pus is sterile on culture with the ordinary media but when digested and injected into guinea pigs produces tuberculosis. It should be especially emphasized that tuberculous pus *may be thick and yellow* (with polymorphonuclear preponderance) even when it is thus sterile to routine culture. If the clinical features of a case suggest tuberculosis the presence of small numbers of the ordinary pyogenic cocci should not deter one from further search for the tubercle bacillus; in fact such cocci, when scanty, should be viewed with suspicion until the possibility of contamination has been carefully excluded.

TUBERCULIN

I Cutaneous Reactions

(a) *Technique of the Pirquet Test*: The flexor forearm is washed with 70 percent alcohol, allowed to dry, and a drop of undiluted old tuberculin* applied near the cubital fossa. About 4 cm. distal to this a drop of old tuberculin control is applied. Longitudinal linear scarifications (0.5 cm. long) should then be made with a scalpel in this order: (a) 4 cm. distal to the control drop, (b) through the control drop, (c) through the old tuberculin drop. (The cuts should be just through the epidermis, not drawing more than very minute drops of blood.) After ten minutes the drops may be wiped off—a separ-

ate sterile dry sponge for each. No dressing is necessary.

(b) *Technique of the Intracutaneous Reaction (Mantoux³)*: This test is a valuable check on the Pirquet and should always be done where the Pirquet has proved negative. Two dilutions of old tuberculin* are necessary for the test: Dilution A, in which 0.1 c.c. equals 1.0 mgm. is made by adding 0.1 c.c. old tuberculin to 9.9 c.c. diluent; dilution B, in which 0.1 c.c. equals 0.1 mgm. is made by adding 0.1 c.c. of dilution A to 0.9 c.c. diluent. A sterile and dry one c.c. pipette graduated in tenths and hundreds, and a 10 c.c. pipette graduated in one c.c. and tenths, are used in making the dilutions, with sterile physiological salt solution, made from distilled water. The dilutions are unreliable if more than two weeks old.

The flexor forearm is prepared as for the Pirquet, the skin stretched tight, and 0.1 c.c. of dilution B injected into (not under) the skin. About 4 c.c. distal to this 0.1 c.c. of a similar dilution of old tuberculin control is injected. (If only one syringe is used the control should be injected first and the syringe rinsed before loading with tuberculin.) In making these injections a tuberculin syringe and 26 gauge needle should be used, and the latter held almost parallel to the skin. A bleb indicates the proper depth is being maintained. Negative results with dilution B should be followed by testing with dilution A about five days later.

(c) *Interpretation and significance of cutaneous tuberculin reactions*. With either the cutaneous or intracutaneous method a reaction is usually apparent in eight to ten hours and has disappeared by forty-eight to fifty-five hours. Hamman and Wolman⁴ have suggested rough basis for standardization of readings as follows:

“Negative reaction: no appreciable difference between tuberculin areas and control.

Slight reaction: definite but slight redness with some infiltration.

+ reaction: wide area of redness with definitely raised center.

++ reaction: wider area of redness with more marked infiltration.

+++ reaction: unusual redness and wide area of infiltration.

All cases which go on to vesiculation.”

The cutaneous tuberculin reactions are of little diagnostic value in adults because they indicate anatomical tubercle as well as actual disease; and the former exists in a very high percentage of clinically healthy adults. A negative cutaneous reaction (Pirquet) in a child should always be followed by the intracutaneous test (Mantoux)—using both dilutions if a negative result follows the weaker. If all these skin reactions are nega-

*1 c.c. of standard Old Tuberculin—1000 mgm.

tive, tuberculous infection may be definitely ruled out except in the presence of (a) extreme emaciation; (b) one of the exanthemata; (c) marked pyrexia from any cause. Willis⁵ believes the cutaneous reactions to be of special pediatric value where there are (1) equivocal signs of tuberculosis of the tracheobronchial lymph nodes; (2) probable but indefinite signs of tuberculosis of the bones and joints; (3) history suggestive of tuberculosis or of intimate exposure to it and with equivocal or negative findings; (4) vague disease of the eye or history of such disease recently.

II Subcutaneous Tuberculin

Subcutaneous injections of tuberculin (dosage ranging from 0.2 mgm. to 5.0 mgm.) have been used for diagnosis, interpretation depending on the local, focal and constitutional reaction. In pulmonary tuberculosis the focal reaction consists in the appearance of, or increase in, moderately coarse rales over the allergic area, possibly transient x-ray clouding, etc. The constitutional reaction is characterized by temperature and pulse elevation, malaise, etc. Since reactions to the hypodermic administration of tuberculin occur in over 50 percent of healthy adults, since the test involves a certain amount of risk and should never be made except in a sanatorium or hospital or under the close supervision of a thoroughly experienced phthisiologist, the test does not come within the scope of this paper. The ill-advised subcutaneous use of tuberculin may seriously activate a questionable or arrested minimal infection and add many months to the curing program.

TUBERCULO-COMPLEMENT FIXATION

The tuberculo-complement fixation test depends upon the demonstration in blood serum of a tuberculosis reagin through its capacity to bind complement in a combination serologically analogous to that of the Wassermann reaction. Because the complement-binding power of this reagin is weak as compared with its syphilitic analogue the test falls short of the Wassermann in clinical usefulness. But it is a mistake to dismiss it as valueless because developmental imperfections and lack of technical standardization happened to lead to the accumulation of confusing statistics during the early history of its clinical application. One need not be an immunologist to interpret the tuberculo-complement fixation test. If the test has been made in a well-equipped laboratory, by a competent serologist, according to one of the generally acknowledged standard techniques (Woolley, Petroff, etc.), an intelligent evaluation of the result is within the ken of any physician who will bear in mind the following facts.

In the presence of a negative Wassermann reaction, a positive tuberculo-complement fixation reaction is of far from trivial significance and may be taken to mean activity in the sense that a

tuberculous focus is producing definite systemic absorption. The fact that this absorption may be quantitatively insufficient to occasion symptoms or physical signs somewhat invalidates the test as an index of the extent of clinical activity. However, a strongly positive reaction, found by repeated observation to be persistent, is very suggestive evidence of impending if not actually existent clinical activity. On the other hand, though a negative reaction does not invariably exclude tuberculosis (e.g. in overwhelming or terminal infections), it is useful in pointing away from tuberculosis where there is need of differentiating such conditions as bronchiectasis, certain forms of chronic bronchitis, and interstitial pneumonia.

BLOOD SEDIMENTATION

A definite relationship has long been recognized between certain physiological and pathological states and the rate at which the cells in citrated blood settle on standing. Westergren⁶ observed what he believed to be a diagnostic type of sedimentation in pulmonary tuberculosis. Since 1918 the very general interest in all phases of blood sedimentation has been attested by the appearance in the medical literature of over six hundred papers on this general subject. The test requires so little apparatus and technical skill that it can be performed by any careful physician in home or office. Of the various techniques in general use, many of the best features are incorporated in the method of Cutler⁷ which is as follows: after drawing 0.1 c.c. of freshly prepared sterile 3 percent sodium-citrate solution through a 20-gauge needle into a dry, sterile 2 c.c. syringe, a vein is entered and blood drawn to the 1 c.c. mark. The syringe is then tilted gently back and forth to avoid clotting, and the mixture promptly injected into a Cutler tube. ("These tubes have an internal diameter of 5 mm. and are marked in millimeters, beginning with zero at the 1 c.c. level, increasing downward to 50.")† The tube is then tightly stoppered until ready for reading. Its contents are then thoroughly mixed and the level of the settling cells noted every five minutes for one hour. These data are graphed (with the time in minutes as abscissa and the level in millimeters as ordinate). Cutler has described fairly characteristic curves for normality, pulmonary quiescence, slight to moderate activity, and moderate to marked activity—the cell levels at 60 minutes for these groups being respectively 3, 15, 20, and 30 mm. Comparison of a patient's graphs from week to week is of distinct value in clinical management and prognosis.

RELATION OF LEUCOCYTE FORMULA TO CLINICAL STATUS

For a number of years efforts have been made to interpret in clinical terms the variations in the

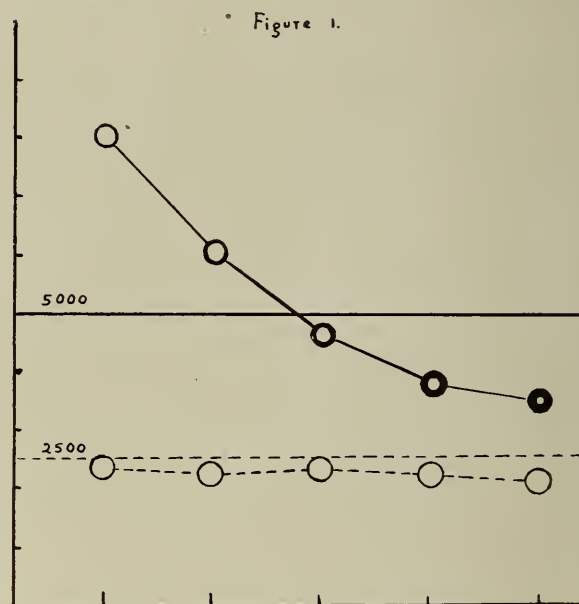
†These tubes may be obtained at a very reasonable price from A. H. Thomas Co., Philadelphia.

leucocyte picture that are known to occur in the peripheral blood during the progress of pulmonary tuberculosis. The literature until recently has been curiously fragmentary.^{8 9 10 11 12 13 14} It is common knowledge that pyogenic coccid infections stimulate polymorphonuclear leucocytosis, that leucopenia with relative lymphocytosis is common in tuberculosis, that the monocyte plays a rather special role in tuberculous infection. From such facts as these it is a natural and commonly drawn inference that certain bacteria through some sort of selective affinity evoke characteristic cellular responses (e.g. staphylococcus aureus, the polymorphonuclear leucocyte, bacillus tuberculosis, the lymphocyte and monocyte, etc.)

But such a simple hypothesis fails to account for all the observed phenomena (as, for example, the chemotactic response of bone marrow to such purely chemical substances as various split products of nucleic acid¹⁵). Furthermore, there have been case reports of pulmonary tuberculosis without secondary terminal infection (autopsy proof), in which for a long period ante mortem repeated blood counts showed the so-called pyogenic coccus blood picture (total leucocytosis with polymorphonuclear increase). At Sunnyside we recently observed a case of uncomplicated tuberculous empyema (without secondary infection) in which each of a considerable series of white blood counts was above 18,000, with the polymorphonuclear cells never below 84 percent. Thus it would seem that it is quite possibly the type of tissue damage, rather than the particular attacking organism, which determines the nature of the body's cellular response to infection, and hence the variety of deviation from the normal blood picture. This general biological fact has an important clinical implication: since polymorphonuclear leucocytosis is as common in uncomplicated pulmonary tuberculosis as those of us with sanatorium experience have found it, may not periodic study of the differential blood picture yield more information as to clinical progress than we have been wont to believe? Medlar is convinced of the fact¹⁶; and our own as yet somewhat limited observations would certainly seem to suggest that in some cases at least the evidence of serial blood counts is of more prognostic value than weight tendency, pulse rate, or temperature.

Every phthisiologist has had the disheartening experience of seeing an apparently quiescent or arrested process relapse during even the most cautious and carefully supervised attempts at resumption of sedentary activity—even though for many previous weeks or months in bed there had been weight gain, slow pulse, absent fever, and satisfactory x-ray evidence of progress. In the laboratory of the Indianapolis Foundation at Sunnyside, Virginia Smith, Lyda Craven, and I have made a careful study of the blood curves in

cases of this type. Apparently in a very considerable number of these patients, premature starts on exercise could have been avoided by careful periodic observations of the differential blood picture. Many more cases will have to be subjected to very critical study before other than tentative conclusions are justified. Nevertheless, our findings to date have been so suggestive that we feel justified in briefly reviewing our general plan of study, in the hope that others interested in this phase of tuberculosis may investigate the question more exhaustively, especially since these methods involve no more technical procedures than the making of a total white cell count and the Wright-staining of ordinary blood smears.



The vertical graduations indicate thousands of cells in the total count; the horizontal, the weekly intervals at which counts were made. Increase in the percentage of the unsegmentally nucleated polymorphonuclear leucocytes is indicated by increasing the shading of the polymorphonuclear circles in the course of that cell's line (the unbroken one). This curve reaching and declining below its base line suggests clinical improvement. But the progressively darker circles in its course indicate increasing tissue destruction. (The lymphocyte curve is here of little help.)

This patient has gained weight, lost his fever, tachycardia, and many of his rales during sanatorium residence. However, stereoscopic x-ray films as compared with those of five months ago show, although some decrease in collateral infiltration, a definite enlargement of two cavities. This case is typical of the group in which clinical evidences (temperature, pulse, weight, and physical signs) are misleading and only the blood curve and x-ray pictures indicate the tissue destruction in progress.

The polymorphonuclear and lymphocyte curves for each case are constructed with reference to horizontal and vertical lines, the graduations of which represent weeks and thousands of cells respectively. Inasmuch as our cases of chronic, well-borne pulmonary tuberculosis show an average total white cell count of 6000 to 9000 (polymorphonuclears 60 to 70 percent, lymphocytes 20 to 40 percent) we have arbitrarily adopted the 5000 and 2500 levels as polymorphonuclear and lymphocyte base lines respectively. Total and differential counts are made weekly at about the

same hour of the day (preferably 10-11 A. M.). In general the higher the polymorphonuclear and the lower the lymphocyte curves deviate from their respective base lines, the worse the prognosis. However, the *tendency* as well as the absolute position of the curves must be considered: e.g., a polymorphonuclear curve, even though high, is encouraging if it consistently tends to drop, especially if there is an associated rise in the lymphocytes. Conversely, a consistently rising polymorphonuclear curve, even though it is little above the base line, is ominous, especially if associated with falling lymphocytes. The blood picture to be satisfactory must manifest curves more or less horizontal, near their respective base lines, or else tending toward those base lines. (Furthermore, the higher the lymphocyte curve transcends its base line the better).

One other factor is considered in evaluating the curves, the percentage of the total polymorphonuclear cells that contains unsegmented nuclei. In a thin Wright-stained smear of normal blood 7 to 12 percent of the polymorphonuclears show an unsegmented nucleus (usually S, U or V shaped). The remaining cells of this type all showing the usual two or more nuclei to each cell. An increase of the number of unsegmentally nucleated cells is characteristic of many infections (Arneth, Schilling, etc.) and is especially common in tuberculosis. This fact must, of course, be taken into consideration in evaluating the polymorphonuclear curve: i.e., a rising curve is rendered that much more ominous by an associated rise in the unsegmentally nucleated cells. On the other hand a falling curve with increase in these abnormal elements indicates that although the general condition may be improving, more or less tissue destruction is in progress. This formula is a common one in the advanced case in which general resistance is improving under sanatorium regime but in which well walled off cavities are undergoing central excavation. (Monocyte, basophile, and eosinophile curves have thus far not been found to have any clearly defined clinical significance, and hence will not be discussed here.)[§]

SUMMARY

I *Tubercle bacillus*:

Various precautions in sputum collection and the technique of staining smears are briefly discussed.

II *Immunological Reactions*:

The clinical value and limitations of the various tuberculin reactions and tuberculo-complement fixation are reviewed.

[§]It may be objected that reliance in the leucocyte picture is unwarranted because of the relatively wide diurnal variations known to occur in normal individuals (3,9,17). However, while there is some tendency to afternoon increase in the white cells in tuberculosis, the range of variation is apparently not nearly as great as in the normal individual. A complete study of these variations is now in progress.

III *Prognostic tests*:

The technique of blood sedimentation determinations and the serial study of the blood leucocytes are outlined, and the usefulness of each in judging clinical progress is emphasized. It is pointed out that the week to week counts of all the leucocytes (including the percentage of unsegmentally nucleated polymorphonuclears) may enable one to construct simple curves which give very real prognostic information. The construction and analysis of these curves is briefly outlined.

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PYELITIS IN INFANTS AND CHILDREN*

(A PLEA FOR FURTHER INVESTIGATION IN FEVERS OF OBSCURE ORIGIN)

IRA COLE, M.D.

NEW RICHMOND

We practitioners of medicine frequently see infants whose only symptom is a sudden elevation of temperature, which may or may not be preceded by a chill. The temperature ranges between 101° and 105° F for three or more days with a remission to normal. During the fever period the child is fretful and uncomfortable, but not prostrated.

After the fever passes it is weak, but bright, and may exhibit no sign of illness. A diagnosis of indigestion or a slight gastro-intestinal disturbance is suggested, and the case is forgotten. In a few days the temperature again rises, runs a high irregular course for two or more days and again subsides.

Kerley¹ says, "When we have an unexplained temperature period in infants and children, especially girls, pyelitis will almost surely be found as the cause."

*Presented before the meeting of the Ninth Councilor District Medical Society, May, 1929.

In this paper we are not concerned with those cases of pyelitis and pyelocystitis in which there is frequent urination with bearing down and straining; but cases in which fever is the only symptom and the diagnosis is only made by finding pus in the urine.

As regards sex, pyelitis occurs more frequently in girls than boys. At least five to one according to some authors. Other men agree that it does occur more frequently in girls but not to the degree which is often thought. Although the disease may occur at any age it seems to be more frequently between the ages of three months and three years. Graham² reports an interesting series of six cases of pyelitis in newly born infants.

The causative factor in the great majority of instances is the colon bacillus, although any of the pyogenic bacteria may gain entrance to the kidney pelvis and cause the disease. Bruce Chown³ reports a series of fifteen cases in which the urines were cultured, and in every one, a bacillus of the colon group was recovered.

The mode of entrance of the causative organism into the kidney pelvis is a mooted question. There seems to be three definite possibilities. First, an ascending infection through the urethra, especially in infancy when vaginal soiling with feces so readily occurs, and possibly explains the greater incidence in girls. Second, by way of the blood stream from some focus of infection elsewhere in the body, as tonsils and adenoids in older children. And third, the great lymphatic network surrounding the colon and rectum offer an ideal route to the bladder and the ureters.

Since the colon bacillus is the most frequent organism found in these cases it would seem that the ascending route through the short female urethra, and the lymphatics from the colon and rectum, offer the better explanation and rather upsets the idea of a blood borne infection from some focus elsewhere in the body. Unless some other infection or inflammatory process in the body so lowers the child's resistance that the colon bacilli, which are often present in the urine in health, have a chance to secure a foothold. Or, possibly a primary infection by any one of the coccal organisms may open the way for secondary invasion by bacillus coli.

However, Helmholtz⁴ has produced primary lesions in the renal pelvis of rabbits by intravenous injection of staphylococci and streptococci, but found that when virulent colon bacilli were enjected they were unable to localize in the presence of these lesions. He says, "The colon bacillus is frequently the primary agent and usually the secondary invader, but by what route it reaches the kidney has not been proved".

That pyelitis does follow the acute infections is proven by the fact that there are two peaks of incidence; late summer following the acute in-

testinal disturbances; and early spring following the acute respiratory infections.

The actual nature of the typical lesion produced is not definitely known. The milder processes seem to be confined to the pelvis of the kidney in the colon bacillus infections. But in cases of long duration the kidney structure proper becomes involved causing numerous areas of suppuration. While infections due to the staphylococcus and the streptococcus organism the lesions are typically cortical from the onset.

In this type of pyelitis under discussion fever is the chief and almost only symptom. Usually there is a sudden rise to 102° or even 105° F. The attack may be preceded by a chill although this is not the rule. Following the onset the temperature ranges between 101° and 105° F for three or more days with a remission to normal. During the period of fever the child is fretful and uncomfortable but not prostrated. After the fever passes the child is usually weak, but bright, and shows no other sign of having been ill. It is at this point we are prone to mistake the condition for indigestion or some trivial gastrointestinal disturbance, and pass it lightly. However, after two or three days of quiescence the temperature again rises, runs a high irregular course for a few days to again subside. There may be abdominal pains with frequency of urination, but as a rule these symptoms are absent. Pallor, sweating, and vomiting may also accompany an attack. Fever with nothing obvious to account for it is a very reliable sign of pyelitis.

CASE REPORTS

M. B.: A girl, aged five years, previously in good health. Her only symptom when examined was fever 103° F. Throat, ears, and chest negative. Abdomen not distended or tender. No vomiting, stools normal. First specimen of urine obtained was clear, acid in reaction, but no pus. The specimen next day, however, showed several pus cells and a few tailed epithelial cells. On large dose of potassium citrate solution the fever was down the following day, and remained so.

J. P.: Boy, aged eighteen months, had seemed perfectly well until two weeks previous when mother noticed a loss of appetite. Two days ago the child became feverish. A physical examination revealed nothing except temperature 102° F. First specimen examined contained many pus cells. After three days of alkali treatment the fever was gone and the appetite greatly improved.

Both cases are important in that fever was the only symptom. The older child lay and sang and was not uncomfortable, while the younger one except for loss of appetite was not sick. The diagnoses in each instance was suggested by an unexplained fever and proven by finding pus in the urine.

Pus is not found in every specimen voided, as was shown in case No. 1 in which first urine examined was negative. At least three specimens should be examined, and these collected on different days before deciding the case is not pyelitis. To be absolutely accurate of course catheterized specimens should be secured, especially if they are to be cultured. However, if the child is carefully washed and the urine caught in a sterile vessel there will not be sufficient contamination to prevent a right diagnosis. (Kerley)¹

Since there is often difficulty experienced in securing urine specimens from infants it might be well to explain two very simple methods. For the boy infants, secure a piece of adhesive three inches square and a test tube with a good shoulder. Cut a hole in the adhesive slightly smaller in diameter than the test tube. Insert test tube through the hole, from the sticky side, and push until the shoulder catches on the margin of the hole. Insert the penis into the test tube and stick the adhesive against the pubis and thighs. For girl infants separate the labia and carefully sponge about the vaginal and urethral orifices. Then fasten a rubber glove or a small Erlenmeyer flask in place by means of adhesive.

These methods can be carried out in the home as well as in the hospital and will enable anyone to secure sufficient urine in a short time for a microscopic examination.

The treatment of pyelitis depends somewhat upon the stage of the disease. During the fever period, and as soon as the diagnosis is made, give 10 grains of potassium citrate every two hours, 60 to 80 grains a day, or, until the urine is rendered alkaline in reaction and maintained so. It is best to continue alkalis for ten days then change to Hexamethylenamine 16 to 24 grains a day for the same period. Alternate in such a manner until the urine is free from pus.

Caprokol, which is a 2½ percent solution of Hexylresorcinol in olive oil, is an excellent drug in this condition and may be given in 1 dram doses three or four times a day.

Hexamethylenamine should be given with plenty of water. It is also good practice to give

sodium acid phosphate in 2 grain doses at same time to render the urine acid, as Hexamethylenamine is effective thru its liberation of formaldehyde only when the urine is acid.

With caprokol it is best to reduce the fluid intake as this drug acts by lowering surface tension. Therefore increasing the quantity of urine increases its surface tension. Alkalis, as sodium bicarbonate and potassium citrate likewise increases the surface tension and are contraindicated with caprokol.

If after three or four weeks of intensive medication the infection does not disappear the case should be referred to a competent urologist for cystoscopic examination and ureteral catheterization. Obstructions to the urinary flow or malformations of the kidneys or ureters are conducive to infection. If pyelitis is discovered early and treatment promptly instituted there is usually a prompt response and the second fever period does not occur. But if the disease has existed several weeks undiagnosed it may require several months of intensive treatment to effect a cure. Every case should have frequent urine examinations for six months after an apparent cure is established.

CONCLUSION

That pyelitis is so frequently overlooked in infants and very young children is due to one of the three following reasons: The indifference to the necessity of a routine examination of the urine in all acutely sick infants; the difficulty, often experienced in securing urine specimens in infancy; and the absence of any sign or symptom pointing to the urinary tract as the source of the trouble.

Consequently in every case of obscure fever, in an infant or an older child, at least make a microscopic examination of the urine.

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INDUSTRIAL TUBERCULOSIS

Sidney J. Shipman, San Francisco (*Journal A. M. A.*, July 27, 1929), asserts that tuberculosis or its activation should be regarded as the result of an industrial accident when: Pulmonary tuberculosis develops within a reasonable length of time in a previously healthy individual, following trauma to the chest, sufficient to cause functional impairment. As a result of trauma to the chest, a previously proved or assumed inactive tuberculosis is reactivated. In this case the liability of the carrier should cease with the arrest of the process. As a result of trauma, impairment of the general health (resistance) occurs, as manifested chiefly by loss in weight, tuberculosis develops or is reactivated before such impairment has ceased. As a result of industrial disease, or diseases directly related to injuries (pneumonia, pneumonokoni-

osis and the like), tuberculosis develops or is reactivated preceding recovery from such a disease or its effects. In a previously healthy bone or joint or other organ, tuberculosis develops at the site of the injury at any time before functional and anatomic restoration of the bone or joint or other organ has taken place, or within a reasonable time after the maximum recovery from such an injury. Hemoptysis occurs from a lesion which has the appearance of an old lesion and when the history and other evidence indicate that no functional impairment existed previous to the hemoptysis, provided such hemoptysis follows trauma. Hemoptysis occurring during the usual occupational routine, whether this involves light or heavy work, should not be considered industrial. Spontaneous pneumothorax, presumed to be of tuberculous origin, follows directly on unusual exertion or injury.

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EDITORIALS

THE EVANSVILLE SESSION

The outstanding feature of the eightieth annual session of the Indiana State Medical Association, held at Evansville, September 25, 26 and 27, undoubtedly was the scientific program. So well were the speakers, both out-of-town and local talent, received that not one of the 814 physicians, their wives and guests who attended the session left without feeling that the trip was worth while despite the keen disappointment over the failure to get a boat ride on the Ohio River and other entertainment as promised by the Evansville physicians.

The session opened with one of its most pleasing events, a chicken dinner at the Evansville State Hospital, where more than 400 physicians and health officers of the state and their families were entertained as guests of Dr. C. E. Laughlin, medical superintendent of the institution. Following this luncheon Dr. Earl D. Bond, administrator and physician-in-chief of the Pennsylvania State Hospital and president-elect of the American Psychiatric Association gave a talk in the attractive, new auditorium of the institution. The Association is deeply indebted to Dr. Laughlin for this generous and pleasing affair.

Along with comments of credit for the unusually high grade scientific program should go a word of praise concerning the most interesting scientific exhibit which, after a lapse of years, is rapidly being reinstated as one of the annual attractions at each session.

The technical exhibits this year were well arranged and attracted much attention. An innovation was the popular vote by physicians for the best technical exhibit, the first award going to the Hoosier Pharmacal Company; second award to the A. S. Aloe Company, and the third award to the American X-ray Company.

The following officers were elected by the House of Delegates:

President-elect (for 1931)—A. B. Graham, of Indianapolis.

Treasurer—William A. Doeppers, of Indianapolis.

Delegates to American Medical Association for

two years—A. E. Bulson, of Fort Wayne, and F. S. Crockett, of Lafayette.

Alternates—Walter C. McFadden, of Shelbyville, and G. D. Scott, of Sullivan.

Dr. E. E. Padgett, of Indianapolis, was elected Chairman of the Council to fill the unexpired term caused by the resignation of Dr. E. E. Evans, of Gary.

Mrs. W. S. Tomlin, of Indianapolis, was named president-elect (1931) of the Woman's Auxiliary. Mrs. W. R. Davidson, of Evansville, being the present head of that organization, and Mrs. M. A. Austin, of Anderson, president for 1930. Mrs. W. C. Moore, of Muncie, was elected vice-president, and Mrs. Alvin E. Newman, of Evansville, treasurer for 1930. Mrs. A. C. Clauser, of Delphi, was chosen chairman of the committee on organization, and Mrs. O. O. Alexander, of Terre Haute, chairman of the *Hygeia* committee.

Fort Wayne was selected for next year's session, over Indianapolis and Michigan City whose delegates also gave an invitation for the 1930 session.

Announcement was made in the House of Delegates and the Council of the election of W. R. Davidson, of Evansville, as secretary of the State Board of Medical Registration and Examination, to succeed E. M. Shanklin, of Hammond, and the House voted its deep appreciation for Dr. Shanklin's fine services to the state and the profession as secretary of the Board.

At the annual banquet the profession heard what perhaps was the most unique address ever presented to a medical group, the essayist being none other than Harold VanOrman, former lieutenant-governor of Indiana, politician, presiding officer, hotel man, humorist, and showman supreme, and his subject being none other than "Scientific Medicine". It was replete with satire, wit and humor, and made all the 350 banqueters, not to mention an overflow crowd of some 200 additional persons, forget the tropical weather and the wild animal life of Vanderburgh County.

After eighteen holes of "mountain-goat" golf the name of Dr. A. P. Walden, of Washington, Indiana, was added to the long list of state medical society champions, his low gross score of 80 giving him an edge of two strokes over his nearest competitors, Dr. Cleon Nafe, of Indianapolis, and Dr. J. O. Parramore, of Crown Point, out of a field of seventy competitors.

Angus C. McDonald, of Warsaw, president-elect, was forced to be absent from the session due to the illness of his wife, and every member of the Association joined in a message wishing Mrs. McDonald an early recovery. Among other "old faithfuls" who were not on hand were Dr. Miles F. Porter, of Fort Wayne; Dr. E. M. Shanklin, of Hammond, and Dr. Charles H. Good, of Huntington, all past presidents, and all regular attendants at annual sessions.

The total registration showed the following present: 522 members of the Association, 53 guest physicians, 43 exhibitors, and 196 women, a grand total of 814.

Perhaps the most important bit of work by the House of Delegates was the acceptance of the resolution introduced in the 1927 session giving the State Board of Health one representative in the governing body of the Association.

The profession is looking forward with great anticipation to next year's session to be held in Fort Wayne September 24, 25, and 26.

OVERZEALOUS HOSPITAL STANDARDIZATION

No doubt hospital standardization has worked to the benefit of hospitals, physicians and public, but there is such a thing as carrying a good thing too far. One of the points that must be emphasized to hospital managers is the fact that the physician is responsible for the patient and if anything goes wrong it is the physician and not the hospital that first comes in for censure. Therefore the physician's judgment and his wishes, within reason, must be respected. Then if the attending physician desires to have laboratory work done for his patient that has been hospitalized he will order it. The hospital should not go over the head of the attending physician and do a lot of laboratory work on its initiative, always at the expense of the patient, much of which may be positively superfluous as well as useless. To follow such a course of action may be one of the rules of hospital standardization, but is an idiotic rule and physicians who send patients to hospitals should object emphatically. In the first place the physician should be competent and trusted or else not admitted to the hospital as an attending physician, surgeon, or specialist. In the second place, if he is trusted then he should be permitted to use his judgment as to when and how much laboratory work is to be done for *his* patient, and it can be taken for granted that he has more interest in the patient than has any hospital, and his judgment probably is better than the hospital management as to when laboratory work is indicated. If the hospital is doing unnecessary and superfluous laboratory work on the plea that it is for the protection of the hospital (?) then let it be known that the patient will *not* be charged for the service. There has been much complaint about the attempt on the part of the management of some hospitals to take too much charge of the patient and to do too much dictating to physicians as to the kind and amount of treatment to be given the patient. Those hospitals should turn over a new leaf and permit the physician to do the practicing, and, on the other hand, the physician who is held responsible for the treatment and care of his patient in the hospital should be permitted to have that con-

trol and not be subjected to unfair dictation on the part of hospital managements.

ECONOMICS OF MEDICAL PRACTICE

We hope that every member of the Indiana State Medical Association has read the report of the Committee on Civic and Industrial Relations as it appeared in the September number of *THE JOURNAL*. It contains some valuable suggestions and criticisms concerning the economic side of the practice of medicine. After commenting upon the fees in industrial cases and the necessity for fairness on the part of most insurance carriers and physicians in the adjustment of compensation for medical and surgical services rendered, the very pertinent comment is made, "The doctor's fees are usually the smallest part of the total cost of medical care." The suggestion is offered that our Association could well afford to create a competent fact-finding board to coordinate all of the services for the sick and injured, to the end that needless service and unnecessary quality or luxury be eliminated, and cost reduced for those who feel the burden of sickness and its attendant anxiety. Efficient and trustworthy medical service cannot be cheapened, but our present system of highly individualized attention may be changed so that volume of service will permit of smaller fees, though furnishing adequate remuneration for highly skilled service.

An appropriate comment offered is that nursing service often is used wastefully under the present system, and very properly could be graded. The present hospital rule that only those nurses who are registered will be allowed to practice in the institution works an unnecessary hardship on those who need some nursing care but not of necessity the highest grade. To this may be added the suggestion that patients in moderate circumstances and with limited income should not expect nor should they be encouraged in having luxurious hospital accommodations and all the frills that go with wealth and affluence.

So far as insurance carriers are concerned, they should be encouraged to look upon the service of the physician and surgeon as highly skilled and deserving of adequate though not extortionate compensation. The tendency of many insurance carriers is to be cold-blooded and hard-boiled in the settlement of all claims, and while perhaps it is not necessary to let sentiment have any bearing upon the matter, yet consistency and fairness should be enforced. The average insurance company is as sweet as honey when taking the premium, but is as sour as a persimmon when called upon to settle claims after premiums have been paid.

The report of the committee offers this significant statement: "If the profession would live and grow with every increasing triumph over the

common enemy disease, we must insist that the physician's remuneration be sufficient to encourage him to greater effort. Destroy all the hospitals, eliminate all the nursing and technical diagnostic aids and other special services and the physician's activities would build them up again, but destroy the medical profession and the hospitals will soon be deserted, and the nursing, diagnostic and other aids would disappear for want of direction and intelligent use. Any economic situation working hardship on the great body of physicians to the end that they lose their initiative and ambition to achieve, will be an unfortunate situation for the rest of humanity."

FEE SPLITTING AND UNNECESSARY OPERATIONS

Now that I have retired from active practice I am in a position to hear the opinions of the laity about the medical profession very freely, and nothing seems to me to be doing us so much harm as the fear of unnecessary operations, especially for that non-existent disease, chronic appendicitis, but also for gall-bladder trouble and duodenal ulcer. People often refuse or postpone operation when they sorely need it, because they have become aware that unnecessary operations are now being done with considerable frequency in a good many parts of the country.

The greatest temptation to unnecessary operations comes, I think, from the practice of fee splitting. No operation, no surgeon's fee; no surgeon's fee, no percentage fee for the general practitioner. So the general practitioner urges operation and arranges with a complacent surgeon to get a share of the money that is stolen from the patient, stolen because no corresponding value is received. It is strange that so many physicians who are indignant at burglaries and holdups should themselves take part in thefts that are accompanied by more danger to life than most burglaries. But I know that such is the case because physicians have themselves confessed and even defended the practice of fee splitting in my presence, usually covering it up with the pretense that they "assisted" the surgeon at the operation. Of course competent surgeons have their own assistants and do not endanger the success of an operation by trying to work with an amateur, which is all that the general practitioner can be in the field of surgical technique. So long as physicians continue to excite in the public mind the well warranted fear that they are not working in their patients' interest, the osteopaths and the chiropractors will continue to flourish and to increase in numbers.—RICHARD CABOT in *Southern Medicine and Surgery*, for September, 1929.

LAY CONTROL OF MEDICAL PRACTICE

Well, well! Lay control of the practice of medi-

cine is making progress. We learn that a promoter is conferring with some wealthy men in Indianapolis and Fort Wayne concerning the organization of a company that will furnish the lay people with medical, surgical and hospital attention for a definite sum per capita per year. The enterprise is to be conducted on the insurance plan, with the sale of policies that guarantee the services offered. The promoter proposes to secure the services of physicians, surgeons, specialists, and hospitals at a flat rate or on a salary basis, and the bait is thrown out to investors that great profits can be secured. So far nothing tangible has developed, for there seems to be some difficulty in working out the details of the plan. Not the least difficult problem to be solved is the question of what is to be paid the professional man.

Another report is to the effect that some of the big life insurance companies are about to offer their policyholders free periodic health examinations, and that a few of the companies are considering the advisability of extending the benefits of their policies to include medical, surgical and hospital attention to their policyholders at a modest advance in premiums.

Thus it will be seen that the pot is boiling and it depends upon medical men, individually and collectively, as to what the product will be. Are there any well-trained and experienced medical men who are going to favor these propositions and be at the beck and call of the bosses who will dictate how, when and where service will be rendered and what the remuneration shall be?

PYORRHEA ALVEOLARIS AS A FOCUS OF INFECTION*

Pyorrhea alveolaris, a disease which destroys the investing structures of the teeth, is the result of chronic, inflammatory, slowly progressive proliferative reaction. The active bacteria of this disease reside within the infected periodontal tissue. They support themselves and produce toxins which, along with bacteria, are carried from this site or focus of infection by way of the blood and lymph streams, to various parts of the body, where they may cause pathologic conditions. Streptococci, when isolated from a deep pocket or infected tissue of a patient troubled with pyorrhea alveolaris will, on injection into animals, reproduce in the tissues of the animals lesions resembling that from which the patient is suffering.

A mixed culture, with the green-producing streptococcus predominating, was usually found in all of the cultures studied. The streptococci were recovered in pure culture from the agar plates, were grown in glucose-brain broth, and

*By T. J. Cook, D.D.S., Division of Experimental Bacteriology, Mayo Clinic. Reprinted from Proceedings of the Staff Meetings of the Mayo Clinic, September 11, 1929.

were used for inoculation of animals. Normal rabbits, weighing on an average 2000 gm., were used throughout the study; each animal received, as a routine, a dose of 5 c.c. at one time. The animals were killed at varying times, depending on the source of the strain of streptococci. Rabbits that received injections of streptococci isolated from patients with iritis were killed within seventy-two hours after the initial injection, whereas those that received injections of streptococci from patients who had arthritis were killed three or four weeks after the initial injection. At necropsy, every organ was examined and the data were recorded; cultures were taken from the various organs.

Forty rabbits were given injections of streptococci obtained from ten patients who had iritis, and lesions of the eyes, resembling those of iritis, developed in 45 percent of the animals. Usually this condition was demonstrable from four to eight hours after the animal had been given the injections with the material cultured. The number of lesions elsewhere in the animals was small. Cultures obtained from the blood and from the eye yielded streptococci in 45 percent of the animals, at necropsy.

Cultures from about the teeth were obtained from twenty patients who had chronic ulcerative colitis, most of whom were hospitalized during the active stage of the disease. A large number of them gave evidence of neglect of toilet of the mouth. Eighty rabbits were given injections with the twenty cultures, and in 33 percent lesions developed in the colon, usually a hemorrhagic infiltration of the lower portion of the colon, accompanied by watery stools. The animals usually appeared sick and weak when despatched. Blood cultures yielded diplostreptococci in 35 percent of the animals. In 8 percent of the animals lesions of the joints developed.

Altogether, forty-four rabbits were given injections with cultures from eleven patients who had ulcer of the stomach or duodenum, and in 36 percent of the rabbits lesions developed in the stomach and duodenum, whereas the percentage of lesions elsewhere in the animals was small. Blood cultures from the animals yielded streptococci in 32 percent.

Material was obtained from about the teeth of ten patients who had nephritis and forty rabbits were given injections of cultures made from this material. In 25 percent of these animals lesions developed in the kidneys, whereas the number of lesions developed elsewhere was small. Twenty-five percent of the blood cultures yielded streptococci.

Forty rabbits were given injections with cultures obtained from deep pyorrheal pockets of ten patients who had disease of the gallbladder and in 30 percent of the rabbits lesions of the gallbladder

developed after injection of the streptococci from the pockets. Twenty-eight percent of the animals gave positive blood cultures.

Three hundred normal rabbits, in all, were given injections of cultures made from material obtained with a platinum loop from observed pockets and from infected investing tissues about teeth affected by pyorrhea alveolaris. The patients from whom the material was obtained were suffering from various diseases. Forty-three percent of the animals died; the others were despatched at varying intervals. The animals were divided into groups; all members of each group received injections of cultures of material from the same source. In some groups the mortality rate was high; in others it was low. There is no explanation of this other than that the virulence of the cultures injected varied; no animal received more than 5 c.c. at one injection. Streptococci were recovered from the blood of these animals in varying percentages. This variability may be explained as being due to the time interval between the injection and death. Among animals which received injections of organisms derived from patients with iritis and colitis the incidence of recovery of streptococci from the blood was higher than among animals which received injections of strains from patients with arthritis, because animals which received the strains from patients with arthritis were not killed until three or four weeks after injection, whereas those which received strains from patients with colitis and iritis were killed within seventy-two hours.

One hundred rabbits were injected with cultures of material taken from twenty-five patients who had pyorrhea alveolaris but who were not suffering from any of the diseases that affected the patients from whom material was obtained for the experiments reported earlier in this paper. These cultures were studied with the same care and accuracy as the other cultures in the series. The mortality rate of the animals was 36 percent and the remainder were despatched with ether at different intervals. In this series, 7 percent demonstrated lesions of the joints and muscles; 6 percent, lesions of the kidneys; 8 percent, lesions of the stomach, and 4 percent, lesions of the gallbladder. Cultures were taken as a routine and in 29 percent of the series streptococci were isolated from the heart's blood.

Despite the ill effects noted in these experiments, an encouraging feature is that pyorrhea alveolaris is definitely a preventable disease and in the great majority of cases in which patients are not hopelessly affected it can be arrested, the lesion healed and the disease permanently controlled by the removal of the existing infection, elimination of the predisposing cause, and with the aid of the patient in the daily toilet of the mouth.

Streptococci isolated from deep pockets and infected investing tissues of the mouths of patients who had pyorrhea alveolaris, and who were suffering from iritis, arthritis, and so forth, on intravenous injection into rabbits, will reproduce the disease in the animals. It is extremely important that from the mouths of patients suffering from a disease on which a focus of infection might have some bearing, pyorrhea alveolaris should be eliminated. Although streptococci isolated from regions of pyorrhea alveolaris practically always are associated with other bacteria, these other bacteria display but little power to produce metastatic infections; therefore, they are not considered in this paper.

EDITORIAL NOTES

DEAR DOCTOR.

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely *free* to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

IN selecting anyone to do anything it is well to select those who not only know how to do it but who *will* do it. That applies to local arrangements for conventions.

IN the May number of THE JOURNAL we stated that a clinic in New York City operated by the American Birth Control League was closed by police. That statement was correct, but we now make the additional statement that the clinic is reported to have been reopened after being closed for twenty-four hours.

THERE is such a thing as false economy, and as we suggested several months ago we believe it is false economy to do without official stenographers at the annual sessions of our Association. It also is false economy to do away with amplifiers which add so much to the value of the general meetings.

IT was uncomfortably hot throughout the entire Evansville session, but in addition to the Turkish baths which the heat and humidity served gratuitously to the physicians attending the convention, it was inexcusable to have no adequate provision made to keep out swarms of bugs. A good grade of mosquito netting over the windows of the meeting rooms would have made the guests more comfortable.

WE do not think it is quite fair to invite medical men of national and even international reputation to come a long distance to a session of our Association and then shunt them off to a section where they talk to a handful of people. Why not put these big men on our general programs, and, for that matter, why wouldn't it be a good idea to have our general programs made up of nationally known men?

IT seems that at the present time physicians are unusually swamped with circulars and letters concerning proprietary remedies or pharmaceuticals the manufacturers of which never have been heard of and the preparations themselves being new and not having the endorsement of the Council on Pharmacy and Chemistry of the A. M. A. or other dependable agents. Physicians should go slow in lending their patronage to such concerns.

WE hope that Indiana physicians are following the suggestion we made concerning the necessity of keeping a record of expenses in attending medical meetings. The amounts paid for railroad tickets, pullman accommodations, room and board, and all other actual expenses incident to attendance at medical meetings may be deducted as professional expense in the computation of federal income tax. The accounts should be itemized and filed away for reference.

AGAIN we have a complaint from a member of the Association concerning the unfair treatment of a collection or adjustment association having offices outside of the state. As usual the offending company has no standing that is sufficient to justify confidence or patronage. High pressure salesmen seem to be able to sell anything to physicians, who seemingly will bite at any kind of bait. Why not investigate for yourself before buying, or before putting your name on the dotted line?

SOME of the Indiana physicians are refusing to make life insurance examinations for three dollars. God bless them! We didn't believe that they had enough nerve to do that. We are pleased to know that a few physicians are getting a little stiffening of the backbone and refusing to be the dupes of life insurance companies that are perfectly willing to pay agents, officers, and any other employees handsome remuneration, but think they can buy medical men for a song, and usually do, and the average physician dances to their music.

COMPLAINT is made in some sections of the state concerning the lowering of the fees of physicians for serving on insanity inquests. It is an insult to offer a well-trained physician only three dollars per day for acting on an insanity commission. As a matter of fact the physicians of the state

should as a unit refuse to serve on these insanity investigations for such paltry compensation. You cannot get any other professional or skilled labor for such fees, and why should the state expect physicians to humiliate themselves by accepting such beggarly sums?

It is time for postgraduate work. Officers of county medical societies can receive much help from our genial executive secretary in arranging postgraduate courses or in procuring the actual delivery of addresses or clinics before those societies that desire the help of outside talent. It is well to remember that the Indiana University School of Medicine is quite willing to furnish a postgraduate medical course for any county medical society that desires it. Application should be made direct to the Dean, with a suggestion as to the character and length of the course desired.

Now it is the beautician. It used to be the hairdresser, who could give a little facial massage and manicure the nails. The service now is no better or even as comprehensive, but it receives greater dignity when given by the beautician, and of course the fees are correspondingly greater. However, we wish there was some law to prevent the beautician from using so many harmful cosmetics. If you don't believe they are harmful ask the Bureau of Investigation of the American Medical Association to tell you something about the injurious qualities of some of the highest priced cosmetic preparations on the market.

"If the doctor or the economist is asked for his ideas as to what should be done about medical charity or any other charity for the middle class, the answer, if true, would be terse. What is the answer? Simply for big business to take a just percentage of the profits that the middle class earns day by day for big business, and put these profits into the pay envelopes of the middle class rather than into the huge philanthropic or educational machines that, after all, are vast monuments to the men who back big business. Pay the middle class just wages and the middle class will pay its bills."—*Illinois Medical Journal*, September, 1929.

THE United States Government now supervises the physical conditions of pilots of airplanes. The physical examinations are of a technical nature and should be conducted by strictly qualified physicians, and especially by those who can determine the stability of the nervous system, equilibrium, color perception, eye muscle balance, vision, and coordination. Pilots who have the responsibility of passengers are required to pass a more rigid examination than others, and it is well that the license lasts for six months only, after expiration

of which another complete and careful physical examination must be made. In no other way can reasonable safety of airplane travel be secured.

THE world is threatened with a very serious prospect for the future if the individual practitioner of medicine is dethroned and scientific medicine is made the football of philanthropists, social workers, lay commercial enterprises, and federal, state and municipal domination and control. We can hear someone say that all matters adjust themselves in due course of time, but sometimes readjustment requires many, many years to undo the wrong that has been done over night. During this readjustment everyone suffers, and it seems irrational and unnecessary for the people to experience such an unhappy state when it can be avoided while following the dictates of reason. Whenever you do away with individual incentive and competitive service you not only stifle progress but aid deterioration. There are indications to the effect that the medical profession as a profession is going to be swallowed and digested by outside agencies, and the medical profession is doing little to avoid the outcome. Will somebody build a fire under the medical profession and stir it into activity?

WITHIN the past month two cases of foreign body in a bronchus, one case in Indianapolis and the other in Fort Wayne, have been sent to Philadelphia for bronchoscopy. Neither of the cases were complicated in any sense, and in both instances the trip to Philadelphia was sanctioned by the attending physician. At the present time there are competent and well-trained bronchoscopists in Indianapolis and Fort Wayne, but as they have not had the benefit of the flattering advertising secured in both medical and lay press by the well-known bronchoscopic clinic in Philadelphia, the efficient and trustworthy home service is overlooked. We are not urging the Indiana bronchoscopists to advertise extensively in either the medical or lay press, but we do feel that the medical men of the state ought to know that we do have competent and well-trained bronchoscopists right in Indiana, just the same as we have good surgeons, gynecologists, obstetricians, ophthalmologists and internists. You don't always get something better just because you go away from home for it.

THE difficulties encountered by one of the members of the Indiana State Medical Association in securing an adjustment of a claim against an accident insurance company for damages in an automobile accident reminds us of the warnings that we have given in THE JOURNAL on several occasions during the past twenty years. Do not buy any kind of insurance *because it is cheap*,

and if you will pin your faith to some assessment company then carry some other insurance in addition. Remember that any insurance company is very sweet when it takes your premium but oftentimes is as sour as a lemon when you want it to pay a just claim. Every company surrounds itself with protective features to prevent being imposed upon unfairly and dishonestly, and as a general thing the smaller and less known the company the more apt that company is to issue policies upon which payment can be avoided through technicalities. Large, well-established and reputable companies as a general rule do not avoid the payment of a claim on a technicality, and if there is any fairness in the claim, payment is made without question.

THE Iodine Producers' Association of South America has established in New York an organization to be known as the Iodine Educational Bureau. It will disseminate information concerning the application of iodine in agriculture, industry, animal husbandry, and in the professions of medicine, dentistry, pharmacy and veterinary medicine.

We are getting used to propaganda of one kind or another to boost the sales of various food products, drugs, and what-not, and, therefore, the announcement of any new bureau creates only a ripple of interest. However, we are strong for bureaus of investigation and publicity as long as the work done is entirely trustworthy and the claims put forth are not tintured with the rankest kind of extravagance or commercialism. The propaganda concerning fruit and certain manufactured food products has been so tintured with commercialism and perversion of the truth that the public is beginning to be fed up on propaganda, and is inclined to take with a grain of salt the statements of bureaus that have axes to grind.

ACCORDING to the *Illinois Medical Journal* (September, 1929), donations to philanthropy during the year 1928 ran into *billions*, and in recent years philanthropists have multiplied in number as also has there been an increase in the endowed institutions made possible through the accumulation of wealth through business enterprises. These men of great wealth who have disbursed their holdings in the ways of beneficence in many instances have defeated their own ends through an improper perspective upon the conditions affected.

Concerning medical philanthropy, which seems to have run riot during the past few years, the editor of the *Illinois Medical Journal* says, "The hour is here and it is speeding by for the organized medical profession to step out as an organization and inform citizens with wealth to distribute and the itch for such distribution, exactly

how the money can be turned into the coffers of medical philanthropy so as to insure the greatest good to the public and the continuance of this same medical expertness of the United States that is the envy of every well-informed statistician and scientist anywhere in the world. The problem is not to be solved in a day. It is even more than the tariff and the prohibition question a problem of direct import to every citizen of the United States, and because of American leadership to every citizen in the world."

WITH all due respect to Dr. Ray Lyman Wilbur, formerly president of a western university, then president of the American Medical Association and now Secretary of the Interior in President Hoover's cabinet, we are just wondering if that learned gentleman and distinguished educator really understands the position occupied by the active practitioner of medicine who now, as in the past, is faced with so many economic problems that promise to annihilate the individual practitioner of medicine. We felt bound to endorse Dr. Wilbur as president of our great American Medical Association, but at that time we had a sneaking suspicion that a man who has had little or no experience in the actual practice of medicine does not thoroughly represent the profession in those positions that should require an intimate knowledge of conditions confronting the average physician. Now that Dr. Wilbur is heading a committee, national in the scope of its work, which is to determine and analyze the facts concerning the cost of medical care, we are just wondering if the result will be cold blooded enough to overlook some of the features that have as much to do with the cost of medical care as those represented by the actual expenditure of money. In other words, we are wondering if service that is machine-like and devoid of that personal and sympathetic element in the relationship of physician or patient is too all-important in the effort to cut down on the cost of being sick.

THE Council of the Indiana State Medical Association has taken a crack at the management of the Riley Hospital, in Indianapolis, concerning the manner in which extravagantly worded propaganda is spread throughout the state as a bid for the commitment of patients to the hospital. It also was charged that the Riley Hospital is receiving patients who are not indigent, and that for those who perhaps are entitled to gratuitous attention the cost to the county from which the patients are sent is very much more than would be the case if similar services were given at home, and in many instances the services are no better than those obtained at home. It also is charged that there are certain officials who as a result of

their positions are demanding and receiving gratuitous services at the Riley Hospital even though amply able to pay for the services.

The suggestion is made that the physicians of the state should have an agreement among themselves to the effect that they will *not* sign commitment papers for the Riley Hospital except in those instances where not only the patient is indigent but it is recognized that a better grade of service may be obtained at the Riley Hospital than at home. Some of the councilors were bitter in their denunciations of the sob sister propaganda sent out by employees of the Riley Hospital. The whole matter will be threshed out at the mid-winter meeting of the Council, but it is hoped that before that time some amicable settlement of the vexatious question will be effected.

WE need more cooperation and coordination between the Indiana State Medical Association as an association and the various state controlled institutions and enterprises in which medical men are interested. The medical men of Indiana should know more about what is being done at the Indiana University School of Medicine, and those who are responsible for the conduct of the school should make it a point to encourage and even solicit the good will and support of the rank and file of the medical profession of the state. We have a great institution, and one that is doing splendid work not only in turning out high grade medical men but in carrying on a superior type of original research work. Unless the medical men of the state go after the information at some little trouble and expense they are very apt to know very little about the school and its accomplishments. We have offered to create a department in THE JOURNAL to be devoted to medical school affairs, but insofar as accomplishing anything from that offer we might as well have offered the department to the Hottentots. In reality the medical school should be courting the good will and support of the medical profession of the state for various reasons, and, on the other hand, the medical profession should be so proud of their state medical institutions that they would go out of their way to support them. However, this sort of coordination and cooperation cannot be secured unless the two factions get together. They are about as far apart now as the sun and the moon.

SEVERAL New York lay organizations are advertising in the New York newspapers and otherwise calling the attention of the public to the value of periodic health examinations. One of the advertisements which recently appeared in the *New York Times* makes a few telling points concerning the periodic health examination when it says that at present there is a great waste in the busi-

ness of living which is not in keeping with the present tendency toward conservation in every activity in life. It is economy to discover and correct the little abnormalities that later on become serious and threaten the integrity as a whole, and if more attention is given to this subject we would hear less about the high cost of medical care. It is the job of the medical profession to promote the periodic health examination idea in every way possible, and this means that physicians must consider not only the immediate condition and needs of the individual but also his remote future. To this end there should be an interest in correcting every physical defect or every defect in living habit that could have any future adverse influence on the efficiency or longevity of the individual. It has been said that the medicine of the future will be that which keeps people well rather than taking care of ills when they occur. The periodic health examination is not the superficial and slipshod attention that some physicians are guilty of giving, but rather a very conscientious and thorough general examination. Unless every physician is prepared to make such an examination he soon will find that his patrons are going to someone else for the service desired.

THE *Journal of the Tennessee State Medical Association* is going to have a department devoted to the professional cards of physicians, and that journal frankly says that it is copying the plan followed by our journal. Incidentally, there are several state medical journals that carry professional cards in the advertising columns. Now comes the *New York State Journal of Medicine* which, in commenting on the action of Tennessee, implies that the practice is deserving of criticism, though on what grounds is not stated. This is amusing to us in the light of the action of the *New York State Journal of Medicine* in withdrawing from the Cooperative Medical Advertising Bureau, sponsored by the American Medical Association, because of a desire to be its own judge as to the character of advertising carried. Forthwith that journal proceeds to accept advertising that is not acceptable to the *Journal of the A. M. A.* or any of the thirty state journals that abide by definite rules concerning acceptable advertising. Inasmuch as it is the consensus of opinion of the editors of a majority of the state medical journals that the *New York State Journal of Medicine* is carrying considerable objectionable advertising, some of which can be designated by no other term than misleading, it is thoroughly amusing to hear any inuendos from that journal concerning the publication of perfectly legitimate and ethical professional cards. It reminds us of the old saying about straining at a gnat and swallowing a camel. That journal would have a far better reputation for ethics and propriety if it

devoted a department to approved professional cards and cut out some of the other advertising it now carries which by many editors and other officers of state medical societies is considered very objectionable. We get sick and tired of hearing so much about the ethics of advertising from journals that come far from living up to the proprieties followed by their co-laborers.

EVERY surgeon occasionally is guilty of an error in judgment or even a mistake, but it stands to reason that the well-trained and experienced surgeon is much less likely to be guilty of errors of judgment or mistakes than the uneducated and untrained physician who attempts major surgical work. This is exemplified in every populous community where good, bad and indifferent services are rendered by physicians who are attempting to care for the ills of humanity. Nowadays a very large proportion of all of the physicians in a given community attempt to do most anything that is necessary for the relief of humanity, including the performance of major surgical operations, whether they have had any special training for the work or not. In consequence there are many tragedies occurring in connection with major surgical operations performed by the unfit. Our attention is called to this matter through rather trustworthy reports that in one of the small cities of Indiana a notoriously incompetent physician, who admittedly has had no training or experience in major surgical work, attempted a complicated bowel operation with the result that the patient rapidly grew worse, and a very competent surgeon who subsequently operated upon the patient found a complete closure of the bowel by sutures for which the previous operator was responsible. Fortunately the patient eventually recovered, and the question now arises as to how much exposure of the bungling surgical efforts of the first attendant is justified. Such incidents are altogether too common and indicate an inexcusable desire to profit at the expense of suffering humanity. In one sense it is the fault of the public in not demanding more competence on the part of those who are to undertake major surgery, though it also in a measure is the fault of the medical profession as a whole in not likewise establishing a standard of fitness for the practice of surgery and adopting some measures for enforcing the requirements. He who intends to hold himself out as competent to do major surgery, in fairness to himself as well as to the the public, ought to avail himself of needed preparation for trustworthy work. On the other hand, the physician who does *not* equip himself by training and experience for the work that he tries to do deserves little sympathy or leniency when he gets into trouble through malpractice suits or otherwise, and professional ethics does not require support from his confreres.

SECRETARIES' DEPARTMENT

I hope every county secretary attended the session at Evansville. The program committee has done itself "pretty" according to *THE JOURNAL*, even if the secretaries did not have a special program. Our big meeting will be in Chicago next spring when we meet at the headquarters of the A. M. A. Michigan, Wisconsin and other states have done this stunt, Indiana can do the same. (This was written before the state meeting was held at Evansville.)

I am asking the council to help pay the expenses of the "goats". I believe it is their duty to help. They can give \$25.00 per "goat" as an honorarium. But the "goat" will have to send in his receipted hotel bill or railroad fare receipt. Hotel bill will probably be the best, because several will drive and a receipt from the ticket agent would be impossible. We want to make this a big meeting.

There are several problems for the county societies to decide: Who is going to represent you in the next legislature? The cults will try a comeback and we will not have a Hewitt there if we don't watch out.

Are you prepared to get set on cost of medical care before some lay organization does it for you? You don't want any upheaval in your society like Chicago has had.

Have you increased your membership? You can control things better the more there are in your society.

Have you improved your programs?

Does your society need improvement? If so, what is your hardest problem? Let me know and maybe I can find a way to help you. At Evansville, I hope to hear from the secretaries. Kick if you know how to do it. Good fellowship will make your society.

Ask Tommy about the "king of Suckers", and how it makes for good fellowship. He knows. I think it is wonderful. You know a social session in a basement or barn does a lot of good.

Any secretary that missed Dr. Harris' talk at our last meeting should make every effort to be in Chicago next spring. He will probably give us more dope on the situation of the doctor and medical care.

The Second District knows how to have a social session—fish, chicken, science and fun on an island in the Wabash river.

Radio programs on medical subjects as broadcast by the A. M. A. help give the people the truth about medical subjects. Urge your patients to listen in.

I hope all the secretaries have had their vacations and now are ready to get new members and the talk of collecting dues for next year.

Did you read in *THE JOURNAL* about Chicago caring for the sick on the installment plan?

All secretaries should watch the Medico-Legal

Department in *THE JOURNAL*. It is young and full of useful knowledge for the doctor.

The "Ama Medical Society" meets in Detroit October 7th and 8th. The Interstate Post-Graduate Assembly meets in Detroit October 21st and 25th.

See you next month.

A. M. MITCHELL,
Chairman.

MEDICO-LEGAL DEPARTMENT

ALBERT STUMP

ATTORNEY FOR INDIANA STATE MEDICAL
ASSOCIATION

What are the limitations on the right to practice of those who obtain limited licenses under the Medical Practice Act as amended in 1927?

The 1927 Act enlarges the field of those who may lawfully practice "healing", as the statute uses the term; and while enlarging the field, all within it are brought under the provisions of the same law.

That part of the statute of 1927 directly applicable reads as follows:

"All persons who are now practicing or may hereafter engage in the practice of chiropractic or any other method or system of healing in this state shall be subject in all respects whatsoever to all the provisions of an act entitled, 'An act regulating the practice of medicine, surgery and obstetrics, providing for the issuing of licenses to practice, providing for the appointment of a state board of medical registration and examination and defining their duties, defining certain misdemeanors and providing penalties, and repealing all laws in conflict therewith and certain acts therein specified,' approved March 8, 1897, and all acts amendatory thereof and supplemental thereto, except that applicants for license to practice chiropractic or any other system or method of healing in which drugs are not administered and which does not include surgery or obstetrics shall not be required to take an examination in materia medica, surgery and obstetrics: PROVIDED, That any chiropractor or practitioner of any other system or method of healing, who is a graduate of a school or college teaching the system or method of healing which he practices, and who was on January 1, 1927, residing in the State of Indiana and practicing chiropractic or any other system or method of healing taught by the school or college of which he is a graduate, shall be given without examination a certificate for a license to practice the system or method of healing in which he has been so engaged."

The "grandfather" clause admitting those who had been practicing any system or method, it will be noted, fixes two conditions for licensing—first, that they must have been residing in Indiana and practicing on January 1, 1927; and, second, that they were graduates of a school or college teaching the system or method of healing they were using on that date. The limited licensees are restricted to the use of the method or system taught by their schools. To employ any method or system not so taught would be beyond their license and could be stopped by injunction. The definite, specific thing such limited licenses could do, would be determined by what was taught in the school of which he graduated.

What is the procedure by which a physician may collect from a decedent's estate for his professional services rendered to the decedent?

Where an estate is opened the physician should file his claim against it with the Clerk of the Court within one year from the date of the notice of appointment of executor or administrator. The statute (1926 Burns An. Ind. St. Sec. 3152) prescribes no particular form in which the statement of claim should be made out, except only that it should be "a succinct and definite statement". It should be "accompanied by the affidavit of the claimant, his agent, or attorney, that the claim, after deducting all credits, set-offs and deductions to which the estate is entitled, is justly due and wholly unpaid." If it is not filed within the year it must be prosecuted solely at expense of claimant; and if not filed within thirty days of final settlement of the estate it is barred.

If the estate is solvent and the claim is allowed by the administrator, or executor, payment is made at the final settlement of the estate. If the estate is insolvent and the claim is allowed, the claim shares in the pro rata distribution.

If the claim is disallowed it is set down for hearing by the court, and is tried as an ordinary civil action. A jury may be had. In the trial the physician is not permitted to testify as a witness in his own behalf as to matters which occurred in the lifetime of the decedent. Neither is an agent competent to testify on behalf of his principal against a decedent's estate as to matters occurring prior to the death of the decedent. 1926 Burns An. Ind. St. Sect. 551 and 553. In the face of the law as to competency of witnesses against estates of decedents the physician must rely, for evidence to establish the service rendered and the value thereof, on the testimony of persons other than himself or those to whom he has himself supplied the information. Nurses, or others in attendance, or other physicians called in consultation, or any persons not interested as parties to the action would be competent witnesses to establish the claim.

DEATH NOTES

E. L. PATTERSON, M.D., of Brookville, died in Indianapolis, September 21, aged 76 years. Dr. Patterson graduated from the Cincinnati College of Medicine and Surgery in 1878.

OLIN E. HOLLOWAY, M.D., of Knightstown, died September 25, aged 73 years. Dr. Holloway was a graduate of the Medical College of Indiana, Indianapolis, in 1881.

ALBERT E. BARBER, M.D., of South Bend, died August 21, aged 60 years. Dr. Barber graduated from the Queen's University Faculty of Medicine, Kingston, Ontario, in 1892.

L. R. McCORMICK, M.D., of Brownstown, died September 14, aged 80 years. Dr. McCormick was health officer for Jackson County. He graduated from the University of Louisville School of Medicine in 1880.

JACOB G. TRESSLER, M.D., of Bargersville, died September 25, aged 81 years. Dr. Tressler had practiced medicine for more than fifty years. He graduated from the Bennett Medical College, Chicago, in 1881.

E. W. GOODWIN, M.D., of Newcastle, died at Mooreland, August 25, aged 90 years. Dr. Goodwin was a Civil War veteran. He was a graduate of the University of Michigan Medical School, Ann Arbor, in 1865.

C. L. NULL, M.D., of Princeton, died September 23, aged 73 years. Dr. Null graduated from the Medical College of Indiana, Indianapolis, in 1891. He was a member of the Gibson County Medical Society, the Indiana State Medical Association and the American Medical Association.

E. R. MASON, M.D., of Bloomfield, died September 19, aged 56 years. He had practiced medicine in Bloomfield for twenty-five years. Dr. Mason was a member of the Greene County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Central College of P. and S., Indianapolis, in 1905.

W. R. MOFFITT, M.D., of West Lafayette, died September 11, aged 79 years. Doctor Moffitt had practiced medicine for fifty years, starting in the town of Chauncey which is now West Lafayette. He was prominent in his profession in many ways. He was made town health officer in 1880, which position he held for forty years, or until he declined reappointment. He was active in the affairs of the Indiana State Medical Association, being a member of the House of Delegates for many years, and councilor for the Ninth District

for eight years. In commemoration of his long and faithful service in the medical profession in his community the members of the Tippecanoe County Medical Society honored him with a celebration upon the fiftieth anniversary of his practice last February. Dr. Moffitt graduated from the Medical College of Indiana, Indianapolis, in 1849. He was a member of the Tippecanoe County Medical Society, the Indiana State Medical Association, and a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

THE Phi Rho Sigma medical fraternity held a convention in Indianapolis, in September.

OCTOBER third commemorated the 75th anniversary of the birthday of William Crawford Gorgas.

THE American College of Physical Therapy will meet at the Hotel Sherman, Chicago, November 4 to 7.

THE Allen County Medical Society held its regular meeting October 1, at the Methodist Hospital, Fort Wayne.

DR. FRANK M. HALL, of Indianapolis, and Miss Opal Jenkins, of Bloomfield, were married September 7th, at Bloomington.

DR. JAMES V. RICHART, of Terre Haute, and Miss Irene Molter, of Terre Haute, were married in Chicago, September 9th.

IN seventy-eight large cities of the United States, 710 deaths occurred from automobile accidents in the four weeks ending September 7.

DR. HAROLD D. CAYLOR, of Bluffton, who has spent the last several years on the staff at the Mayo Clinic, has resumed practice in Bluffton.

THE Tippecanoe County Medical Society held its meeting at Lincoln Lodge, Lafayette, September 12. Dr. James Carr, of Chicago, presented a paper on "Uremia."

DR. F. V. OVERMAN AND DR. D. S. ADAMS have returned to Indianapolis after spending the summer attending the ear, nose and throat clinics of Vienna, Austria.

THE California Medical Association and the publishing office of *California and Western Medicine* have moved from the Balboa Building to 450 Sutter Street, Room 2004, San Francisco.

DR. J. B. MAXWELL, who has been a member of the medical staff of the Logansport Hospital

for several years, has resigned to accept a position at the state school for feeble-minded at Butlerville.

THE Grant County Medical Society held its meeting at the Hotel Spencer, Marion, September 18th. Dr. Harold A. Rosenbaum, of Chicago, talked to the society, his subject being "Syphilis in Children."

At the September 17th meeting of the Fort Wayne Medical Society, Dr. W. W. Duemling gave an illustrated talk on "The Importance of Diagnosis of Lesions of the Lips and Oral Mucosa."

THE new addition to St. Joseph's Hospital in Fort Wayne was dedicated recently. The addition is completely modern in every respect and contains surgical rooms of latest design and equipment.

DR. O. M. DEARDORFF presented a paper on "Some Obstetrical Problems" before the meeting of the Delaware-Blackford County Medical Society, held at the Hotel Roberts, Muncie, September 17th.

THE Muncie Academy of Medicine held its first meeting at the Hotel Spencer, Marion, September 18th. Dr. Harold A. Rosenbaum, of Chicago, talked to the society, his subject being "Syphilis in Children."

THE first meeting of the Indianapolis Medical Society was held October 1. Mr. Merle Sidener, of Sidener-Van Riper and Keeling, Inc., spoke to the society on "The Physician, His Ethics and Advertising."

CONTRACTS totalling \$519,698 for the new power plant at the Indianapolis City Hospital, the first unit in a two million dollar construction program, were awarded by the Board of Public Health, September 6.

DR. ROBERT A. SMITH, son of the late Dr. George Smith, of New Castle, has opened new offices in the Coliseum Building in New Castle, where he will practice his specialty of diseases of the eye, ear, nose and throat.

DR. AND MRS. A. M. MENDENHALL, of Indianapolis, have returned from Memphis, Tennessee, where Dr. Mendenhall attended the session of the American Association of Gynecologists, Obstetricians and Abdominal Surgeons.

THE annual meeting of the American Academy of Ophthalmology and Otolaryngology will be held in Atlantic City, October 21 to 25, under

the presidency of Dr. Harris P. Mosher, of Boston. Headquarters will be at the Hotel Traymore. Dr. Herbert Tilley, of London, will be the guest of honor.

ALBERT ALLEMAN, M.D., of Washington, D. C., has sent out notices to inform subscribers of the *Medical Interpreter* that he resigned as editor of that publication in December, 1928, and that he is no longer responsible in any manner for the actions of its promoters.

DR. JOHN LITTLE, of Logansport, was elected permanent honorary president of the Cass County Public Health and Welfare Association, in recognition of his twenty-one years of service in association work, at the annual meeting of the Association held September 13th.

EVERY Indiana physician especially interested in eye, ear, nose and throat work should attend the annual session of the Indiana Academy of Ophthalmology and Otolaryngology to be held in French Lick, December 13th and 14th. An unusually interesting program will be presented. The guest will be Dr. Edward C. Ellett, of Memphis, Tennessee, who will deliver an address on a very practical subject. The officers of the Academy are: President, Dr. Albert E. Bulson, Fort Wayne; secretary, Dr. Robert J. Masters, Indianapolis.

A BOOKLET describing the course of clinical lectures to be given at the Pathological Department of the Central State Hospital, at Indianapolis, has been published. The course in psychopathology will be presented by Dr. Bahr, social psychiatry by Dr. Prenatt and courses in psychiatry, neurology and neuropathology will be given by various teachers including Dr. Bruetsch, Dr. Carter, Dr. Sterne and Dr. Hutchins. The Central State Hospital is co-operating in every way with the Indiana University School of Medicine in offering facilities for the study of mental and nervous diseases.

THE Seventh District Medical Society will hold its meeting at Martinsville, at the Home Lawn Sanitarium, October 29th. The afternoon program will consist of the president's address, by D. O. Kearby, M.D., Indianapolis; "Puerperal Peripheral Gangrene," by Walter L. Portteus, M.D., Franklin; "Goitre," by W. D. Little, M.D., Indianapolis; "Tuberculosis," by J. S. McBride, M.D., Indianapolis; "Menopause Arthritis," by Leon Gray, Martinsville. At the evening banquet Dr. Morris Fishbein will be the guest speaker. Edward M. Pitkin, M.D., of Martinsville, is secretary-treasurer of the society.

THE Indianapolis Medical Society has sent out its program for meetings during the months of October, and special attention is called to the three lectures to be given by Professor Moenkhaus, of Indiana University. The lectures will be given at the Athenaeum, October 8th, October 22nd and November 5th. On October 1, Mr. Merle Sidener presented a paper on "The Physician, His Ethics and the Ethics of Business." October 15th meeting will consist of a case report program. At the October 29th meeting Dr. Harld S. Hatch will present "The Treatment of Allergic Diseases", and Dr. Kenneth L. Craft "The Treatment of Hay Fever."

THE Eugenics Research Association, Cold Springs Harbor, Long Island, N. Y., has offered a prize of \$3,500 for the best essay on the causes of the fall in the birth rate. Essays may be written in English, German or French, but must be unsigned except as identified by a motto and accompanied by a sealed envelop containing the name and address of the author; they must be mailed to the association not later than June 1, 1930. They should include an analysis of studies made and lay stress on the phenomenon in peoples of Nordic or chiefly Nordic origin in all parts of the world. Preference will be given to essays which are based on objective studies rather than expressions of opinion.—*Journal of the A. M. A.*, September 28, 1929.

THE Indianapolis Medical Society is sponsoring a post-graduate course in some of the fundamentals of medicine. It is believed that the physician who has been out in general practice, or in a specialty for a number of years, feels the need of refreshing his memory concerning some of the things which he has not studied since leaving medical school. Dr. William J. Moenkhaus, of the Indiana University, will give a series of three lectures, each one complete within itself. On October 8 his subject will be, "The Physiology of the Heart-beat," which will be given clinical discussion by Dr. Edgar Kiser. On October 22 Doctor Moenkhaus will present "The Psysiology of the Sympathetic Nervous System," which will be discussed by Dr. Larue D. Carter. On November 5, Doctor Moenkhaus's subject will be "Kidney Function and Its Relation to Blood Chemistry," and Dr. H. O. Mertz will discuss this subject. Any physician who is a member of the State Association, internes and medical students are invited to hear these lectures. All meetings will be held at the Athenaeum, Indianapolis, at 8:15 p.m.

In addition to the articles already enumerated, the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Abbott's Viosterol Cod Liver Oil.

Ciba Co., Inc.:

Atoquinol-Ciba.

Vioform-Ciba.

Eli Lilly & Co.:

Inhalant Ephedrine (Plain)-Lilly.

Hypodermic Tablets Ephedrine Hydrochloride-Lilly, 0.016 Gm. ($\frac{1}{4}$ grain).

Hypodermic Tablets Ephedrine Hydrochloride-Lilly, 0.0325 Gm. ($\frac{1}{2}$ grain).

Hypodermic Tablets Ephedrine Sulphate-Lilly, 0.016 Gm. ($\frac{1}{4}$ grain).

Hypodermic Tablets Ephedrine Sulphate-Lilly, 0.0325 Gm. ($\frac{1}{2}$ grain).

Lilly's Ephedrine Jelly.

Ointment Ephedrine Compound.

Syrup No. 110 Ephedrine Sulphate.

Syrup No. 111 Ephedrine Sulphate.

Mead Johnson & Co.:

Mead's Powdered Lactic Acid Milk, Non-Curdling No. 1 with Dextrose.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION EVANSVILLE SESSION

SEPTEMBER, 1929

HOUSE OF DELEGATES

FIRST MEETING

The first meeting of the House of Delegates was held in the Pompeian room of the Hotel McCurdy, Evansville, Indiana, Wednesday, September 25, 1929, at 4:00 p. m. Dr. Charles E. Gillespie, of Seymour, the president, presided.

Roll call of delegates by Dr. George D. Miller, of Logansport, chairman of the Committee on Credentials, showed 67 delegates present. This being a quorum, the president declared the House of Delegates open and ready for the transaction of business.

Moved by Dr. Frank W. Cregor that the minutes of the previous meeting, as printed in THE JOURNAL, be accepted and that the reading of the minutes be dispensed with. Motion seconded by Dr. George D. Miller, and carried.

The following Reference Committees were appointed by the president, in accordance with Chapter IX, Section 1, of the By-Laws of the Association:

COMMITTEE ON SECTIONS AND SECTION WORK

J. M. Pulliam, Fort Wayne (Chairman).....	Allen County
M. C. McKain, Columbus.....	Bartholomew County
H. C. Wadsworth, Washington.....	Daviess-Martin County
C. F. Hope, Ellettsville.....	Orange County
M. F. Johnston, Richmond.....	Wayne-Union County

COMMITTEE ON RULES AND ORDER OF BUSINESS

J. E. Rarick, Wolcottville (Chairman).....	LaGrange County
R. W. Shanks, Noblesville.....	Hamilton County
W. L. Grossman, North Vernon.....	Jennings County
T. W. Oberlin, Hammond.....	Lake County
H. C. Haden, Evansville.....	Vanderburgh County

COMMITTEE ON MEDICAL EDUCATION AND HOSPITALS

O. G. Brubaker, North Manchester (Chairman).....	Wabash County
J. C. Carmack, Indianapolis.....	Marion County
Charles Stoltz, South Bend.....	St. Joseph County
C. E. Holton, Osgood.....	Ripley County
S. M. Casey, Huntington.....	Huntington County

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

T. Z. Ball, Crawfordsville (Chairman)	Montgomery County
J. F. Loomis, Marion	Grant County
E. T. Riley, Greensburg	Decatur County
H. H. Wheeler, Indianapolis	Marion County
W. H. Stemm, North Vernon	Jennings County

COMMITTEE ON PUBLICITY

Walter C. McFadden, Shelbyville (Chairman)	Shelby County
C. E. Stone, Bedford	Lawrence County
Harry Elliott, Brazil	Clay County
Herman Baker, Evansville	Vanderburgh County
P. C. Bentle, Greensburg	Decatur County

COMMITTEE ON HYGIENE AND PUBLIC HEALTH

W. F. Carver, Albion (Chairman)	Noble County
Boaz Yocum, Coal City	Owen County
J. H. Walker, Scottsburg	Scott County
F. T. Romberger, Lafayette	Tippecanoe County
A. L. Spinning, Covington	Fountain-Warren County

COMMITTEE ON AMENDMENTS TO CONSTITUTION AND BY-LAWS

A. C. Yoder, Goshen (Chairman)	Elkhart County
A. L. Marshall, Indianapolis	Marion County
H. H. Reeder, Jeffersonville	Clark County
H. S. Leonard, Indianapolis	Marion County
Frank May, Palmyra	Washington County

COMMITTEE ON REPORTS OF OFFICERS

George R. Daniels, Marion (Chairman)	Grant County
J. A. MacDonald, Indianapolis	Marion County
F. H. House, Westville	LaPorte County
Paul A. Garber, South Whitley	Whitley County
J. R. Gillum, Terre Haute	Vigo County

COMMITTEE ON CREDENTIALS

George D. Miller, Logansport (Chairman)	Cass County
J. W. Vizard, Pleasant Mills	Adams County
J. W. Lucas, Brookville	Franklin County
W. E. Amy, Corydon	Harrison County
Wm. Muelchi, Tell City	Perry County

COMMITTEE ON MISCELLANEOUS BUSINESS

E. C. Totten, Madison (Chairman)	Jefferson County
O. B. Nesbit, Gary	Lake County
J. T. Oliphant, Farmersburg	Sullivan County
G. J. Geisler, South Bend	St. Joseph County
Grant Markle, Winchester	Randolph County

THE PRESIDENT: Members of these committees are appointed for this session only. These are not standing committees. There was this misunderstanding last year, and a member of one of these committees was very much hurt because his name was dropped and not carried throughout the year in THE JOURNAL. The members of these committees are to serve just during this session. This list of reference committees was made up from the list of delegates. If the delegates appointed are not here, their places will be taken by their alternates.

The Reports of Officers and Standing Committees having been printed in THE JOURNAL, were referred to the proper reference committees, each chairman being allowed five minutes to make any explanation or addition to the report already published.

Report of Executive Secretary: Referred to Committee on Reports of Officers.

Report of Treasurer: Referred to Committee on Reports of Officers.

Report of Chairman of Council: Referred to Committee on Reports of Officers.

REPORTS OF STANDING COMMITTEES

Report of Committee on Credentials: Referred to the Reference Committee on Credentials.

Report of Executive Committee: Referred to the Committee on Reports of Officers.

Report of Committee on Public Policy and Legislation:

Referred to the Reference Committee on Public Policy and Legislation.

Report of the Bureau of Publicity:

DR. WM. N. WISHARD, Chairman of Bureau of Publicity: There are eight or nine printed pages of our report, and I will not read the entire report but merely state the fact that the Bureau of Publicity is meeting every week for a half day practically, and as much oftener as is necessary. We are promoting the work with which you are familiar, namely, a dissemination of such medical facts as are of interest to the public, a stimulation in the interest of periodic health examinations, and the supplying of speakers for talks that are requested of the Bureau. I want to stress the fact that the subject of periodic health examinations is one of the most important phases of the work of the Bureau of Publicity. We have had a rise and fall in the interest of the profession in this particular subject. We are not promoting the work of periodic health examinations, but we are promoting the education of the public.

We are sending out speakers for club meetings only when those clubs have the approval of the local county societies. We are trying to cooperate with the county medical societies, and we are trying to disseminate information to the public in an understandable way. There is no let-up in the work. I want to extend my appreciation to the secretary for his constant and careful attention in this work and also to the other members of the committee.

Report referred to the Reference Committee on Publicity.

Report of Committee on Medical Education and Hospitals: Referred to the Reference Committee on Medical Education and Hospitals.

Report of Committee on Scientific Work: Referred to the Reference Committee on Scientific Work.

Report of Committee on Necrology: Referred to the Reference Committee on Miscellaneous Business.

Report of Committee on Industrial and Civic Relations: Referred to the Reference Committee on Public Policy and Legislation.

Report of Delegates to the A. M. A.: Referred to Committee on Reports of Officers.

Committee on Arrangements: No formal report.

Report of Diphtheria Committee: Referred to the Reference Committee on Hygiene and Public Health.

Report on Budget: No formal report as the budget figures and the actual expenditures will not be available for comparison until the first of the year. This report will be printed in the January number of THE JOURNAL.

The following communications were read by the Secretary:

"Milwaukee, Wisconsin, Sept. 9, 1929.

"Mr. T. A. Hendricks, Executive Secretary.

Indiana State Medical Association,

Hume-Mansur Building,

Indianapolis, Indiana.

"Dear Mr. Hendricks:

"On the occasion of the annual session of the Indiana State Medical Association, in session at Evansville, Indiana, September 25th to 27th, we extend greetings to your officers, members and guests, and a cordial invitation to attend the International Assembly of our Association, to be held in the City of Detroit, October 21st to 26th.

"Very truly,

"INTERSTATE POSTGRADUATE MEDICAL ASSOCIATION OF NORTH AMERICA.

Edwin Henes, Jr., M.D., Executive Secretary."

"September 5, 1929.

"To the House of Delegates of the Indiana State Medical Association:

"Gentlemen:

"In the letter of information and instruction sent out in April by the Women's Auxiliary to the American Medical Association, article 8 reads:

"Inasmuch as some of our auxiliaries are even now guided by the medical societies of which they are auxiliaries, we still ask that an official advisory council be appointed by the medical societies or associations, thereby insuring protection to the auxiliaries and promoting uniformity. If the National Auxiliary has an Advisory Council, it is fully as important that the state Auxiliaries and their components also have them."

"In accordance with this expressed desire of the national organization, the Woman's Auxiliary to the Indiana State Medical Association ask that an Advisory Council of three or five for their body be appointed by the House of Delegates.

(Signed)

"HELEN M. DAVIDSON
(Mrs. W. R. Davidson),
"President, Woman's Auxiliary to the
Indiana State Medical Association."

DR. FRANK W. CREGOR: I would like to inquire what disposition the chair will make of this matter. Will it be referred to a reference committee or will the House of Delegates make a motion? If so, I should like to make a motion.

THE PRESIDENT: It would be well to have some discussion on this and then refer it to the Committee on Miscellaneous Business.

DR. FRANK W. CREGOR: The purpose of this Auxiliary in asking that an advisory council be appointed to advise them is to keep them out of trouble and we, of course, realize that people dealing with medical subjects are very likely to be involved in medical matters. It is a movement that is adopted and is operating in the American Medical Association, and it is in conformity with that movement that the Auxiliary is acting. The council probably should consist of three members.

DR. WM. R. DAVIDSON: I believe it is a very worthy call for aid. Very obviously our own women members have been organized into an association, and their work is our work. Their interest is our interest. I believe that the members of this Association, as they find the possibilities for working with this Woman's Auxiliary, will be surprised at the opportunity they will have to further our own interests. I believe a call like this is not to be disregarded. The more we get into it the more we will see and realize the needs of the Auxiliary. They will bring before the women's clubs the work of the medical profession. I can commend the work of the Auxiliary very highly. (Matter was referred to the Executive Committee.)

The following announcement of the Committee on Organization of the First International Congress on Mental Hygiene was read by the Secretary:

"The First International Congress on Mental Hygiene sponsored by mental hygiene and related organizations throughout the world, is to be held May 5-10, 1930, at Washington, D. C. As this congress is the first world gathering of leaders and workers in so diversified and significant a movement as the modern mental hygiene movement, its organizers regard it as of unusual importance. They invite the attendance and participation of all who are interested in any phase of mental hygiene.

"The American Psychiatric Association and the American Association for the Study of the Feeble-minded are planning to hold their annual meetings in conjunction with the International Congress.

"CLIFFORD W. BEERS.

Secretary-General.

"JOHN R. SHILLADY.

Administrative Secretary."

On motion of Dr. Miller, duly seconded, the House took a standing vote of sympathy for the family of Dr. William F. Howat, past president of the Association, who died in August. The secretary was instructed to convey the sympathy of the House to the family of Dr. Howat.

On motion of Dr. Cregor, duly seconded, the secretary was instructed to send a wire of sympathy, with

wishes for a speedy recovery of Mrs. Angus C. McDonald, the wife of the president-elect, who is in the hospital at Rochester, Minnesota.

READING OF MEMORIALS AND RESOLUTIONS

DR. CREGOR: This resolution has to do with a matter in which I think we are all interested.

WHEREAS, Secretaries, past and present, are to be commended for their efforts to preserve matters of historical interest to the Indiana State Medical Association, and

WHEREAS, it is difficult or impossible to compile a History of Medicine in Indiana unless some systematic method is adopted for that purpose,

THEREFORE, BE IT RESOLVED, that the Committee on Publicity of the Indiana State Medical Association be requested to establish Archives of Medical History of Indiana and that this committee recommend to the House of Delegates the name of a member of the Indiana State Medical Association as Historian, and that the appointment of such Historian shall be permanent when so elected by the House of Delegates until removed by death or has become incapacitated from other causes and that, thereafter, when a vacancy occurs in this office, it shall be filled by nomination by the president of the Association and election by the House of Delegates.

On motion, duly seconded, this resolution was referred to the Reference Committee on Publicity, report to be made at the Friday morning meeting of the House of Delegates.

DR. HARRY ELLIOTT: A resolution commending the work of the Committee on Public Policy and Legislation.

After two years' experience under the medical practice act as amended in the 1927 session of the legislature we feel that Indiana has placed herself high in the list of states that are elevating the standards of the practice of medicine.

We owe the passage of the famous House Bill No. 39 to many untiring workers in the profession, of whom Dr. John H. Hewitt is a notable example as he was a senator from the counties of Vigo and Sullivan during that session. He also has been chairman of the Committee on Public Policy and Legislation for the past two years and during this session of 1929 when an unsuccessful fight was made to invalidate the law.

THEREFORE, BE IT RESOLVED, that the House of Delegates commendably appraise the achievements of Dr. Hewitt and the other members of the Committee on Public Policy and Legislation, Dr. O. T. Scamahorn and Dr. Louis E. Fritsch, and hereby extend them a vote of appreciation.

On motion, duly seconded, this resolution was referred to the Reference Committee on Public Policy and Legislation to be reported back at the Friday morning meeting.

DR. J. F. LOOMIS: In reference to the pay physicians receive for holding insanity inquests. In our county formerly a physician received \$9 for an inquest. Two years ago this was cut down to \$6. Within the last few months it has been reduced to \$3, which certainly is too small a fee. The physician must take testimony of witnesses and also has to make a complete report, swear to it, and file it with the county clerk, for the sum of \$3. The law, I understand, says \$3 per day for services in insanity inquests, and it allows the physician only one day's pay. A physician told me today that the judge in his county required each physician to spend two days for the sum of \$3. Some physicians in the state have been sued for malpractice. A judge, in acting as a special judge in the courts, receives \$10 for each day. If he is there only ten or fifteen minutes he receives \$10 for that day. I have a resolution which I would like to present to this House of Delegates as a protest against the pay which a physician receives for his services in making insanity inquests. Several physicians in our county have refused to act in this capacity. I consulted the very best firm of lawyers in our town and they tell me a physician cannot be compelled to serve on these cases. It is not

contempt of court if he does not serve. We had the whole matter up before our local society last week.

WHEREAS, under the present Statutes of Indiana, and the Regulations of the State Board of Accounts of the State of Indiana, it appears to be impossible for physicians to receive more than Three Dollars (\$3) for their services in insanity inquests, as prescribed by the Statutes of Indiana, in cases in which persons are examined to determine whether or not they are fit subjects for treatment in an insane hospital; and,

"WHEREAS, the said sum of Three Dollars (\$3) is wholly inadequate as a compensation for the services necessarily performed by a physician in such a proceeding; so inadequate, in fact, that many physicians throughout the State are refusing to act in the capacity of examining physician in such cases;

"NOW, THEREFORE, BE IT RESOLVED, That the Legislative Committee of the Association be and it is hereby instructed to take this matter up with the next session of the State Legislature, with a view to amending the law, so as to provide some method by which physicians serving in the capacity of Examining Physician in insanity inquests may receive reasonable compensation for the services actually rendered in such inquests."

On motion, duly seconded, this resolution was referred to the Reference Committee on Public Policy and Legislation, to be reported on at the next meeting of the House of Delegates, Friday morning.

THE SECRETARY: Dr. Ross, chairman of the Executive Committee, has asked me to read you this resolution:

"BE IT RESOLVED: That Chapter XII of the By-Laws of this Association, being the chapter of the By-Laws pertaining to Medical Defense, be and the same hereby is amended by adding thereto an additional section to be numbered Section 16, which section shall read as follows:

"Section 16. Medical defense as provided for by this Association shall be available to members, under the terms stated in these By-Laws, only in the defense of civil actions for malpractice."

This matter was referred to the Reference Committee on Amendments to the Constitution and By-Laws, to be reported on at the Friday morning meeting.

Under the head of "Unfinished Business" the secretary read a resolution presented by Dr. A. J. Hostetler, delegate from LaGrange county, at the 1927 session of the House of Delegates, "That the By-Laws of this Association be amended whereby the Indiana State Board of Health may name a delegate to the Indiana State Medical Association, which delegate shall be a physician." This resolution at that time was laid over one year, to be taken up as unfinished business. The matter came up as unfinished business again at the 1928 session of the House of Delegates, but upon the request of Dr. Hostetler, it was laid on the table.

DR. A. J. HOSTETLER: We have four regular licensed practicing physicians on the Board who are members of this Association. It came to my mind that through this Association would be the only real way to get rid of state medicine. We are absolutely opposed to it, and we come to you to help us solve this problem. I brought this before the House because I thought this would be the only place where the State Board of Health could be placed in touch with you, and by which you could be brought in close touch with them. I feel that the State Board of Health should represent the state of Indiana. The State Board should look after the health of Indiana. We do not try or pretend to do anything outside of the line of indigent help. We come to you asking you to help us out. If this is not the way to proceed, someone give us a plan that will work. If you do not feel that by giving us representation this way we can serve you, give us a means by which we may be your servants and not your dictators.

DR. W. F. CARVER: This is a good time to get all the spleen out of our minds, to get rid of all of this racket that has been going on. You all know the under-

current that has been extended against our good friends on the State Board of Health. I don't know whether or not the Constitution and By-Laws would allow them to send a delegate to this House. Of course these four physicians who are temporarily a part of this State Board of Health are all members of the Association. It seems to me that there is a germ of a good idea in this. It would give us a liaison officer. It would get us in touch with the officers. Let's do it. I'm not afraid of it. Why shouldn't we get in touch with them? It looks to me as if this is a sensible idea.

DR. WM. R. DAVIDSON: As a matter of precedent I rather question the advisability of pushing into this organization representation that primarily comes from an organization of the state. I don't believe it would be wise to make any such arrangements as proposed. It opens up the possibility that the State Board of Medical Registration and Examination may ask for a representative, also the State Board of Charities, etc. * * * The question of the advisability of a constitutional amendment is one that I want to bring up.

DR. J. M. PULLIAM: The members of the State Board of Health are working with us. I heartily approve of the plan of giving a delegate from this body in our House. I don't think the secretary should be the delegate, but I think that one of the regular members should be the delegate. Perhaps it will call for an amendment to the Constitution.

DR. F. W. CREGOR: I knew of the introduction of this resolution two years ago, and I did not object to its laying over for a year or two. The purpose of the resolution or the amendment to the By-Laws is simply comparable to the national organization; the Army, the Navy and the health authorities have representation in the national organization. If the State Board of Health sees fit to send its delegate once a year it certainly can't hurt this body. This motion amends the By-Laws and provides that the State Board of Health may name a delegate, I suppose in the same way we name our delegates. The purpose of it is to keep the State Board of Health in touch with the sentiment of the medical profession of the state. I think the resolution should be adopted and adopted unanimously. I think it is a step forward; and certainly should do good for our organization. It will keep the State Board of Health in touch with public sentiment. I move its adoption.

Motion seconded by Dr. Harry Elliott, but lost.

DR. WM. A. DOEPPERS: Does that pave the way for the State Board of Charities, the State Board of Medical Registration and Examination, etc., to ask to have a delegate?

DR. DAVIDSON: Yes.

DR. CREGOR: Each of these questions must stand on its own merits, and has nothing to do with the present matter.

DR. FRANK S. CROCKETT: I am in favor of this motion. We should retain the right to accept or reject the delegate from the State Board of Health for reasons of our own.

DR. J. M. PULLIAM: I would like to amend that motion to the effect that the delegate from the State Board of Health be a member of some county medical society.

DR. F. W. CREGOR: The motion is out of order, for we take it that the delegate will be a member of the State Association.

THE PRESIDENT: The resolution is "That the By-Laws of this Association be amended whereby the Indiana State Board of Health may name a delegate to the Indiana State Medical Association, which delegate shall be a physician."

DR. F. W. CREGOR: This delegate shall be a member of the Indiana State Medical Association.

DR. J. M. PULLIAM: I offer my amendment again, that the delegate selected shall be a member of some county medical society.

DR. F. W. CREGOR: Why not make it clear enough so that there will be no chance of misunderstanding? The intention of the original motion was that he must be a regularly licensed practicing physician and a member of the Indiana State Medical Association. I make the motion that the delegate must be a member of the State Board of Health, and a member of the Indiana State Medical Association.

Dr. Cregor's amendment to the resolution was seconded by Dr. Miller, and carried. It was voted unanimously that the original resolution be adopted.

DR. A. J. HOSTETLER: I assure you that you will not be harassed by anything that is wrong. We will serve you to the best of our ability.

The second matter to come before the House under the head of "Unfinished Business" was the special report of the standing committee on Public Policy and Legislation upon the resolution on the policy of the Indiana State Board of Health. This resolution was introduced by Dr. J. M. Pulliam at the 1928 session of the House of Delegates.

THE PRESIDENT: Inasmuch as this is a rather voluminous report I suggest that the matter be laid over until Friday morning, and that it be brought up again at that time as unfinished business. (Taken by consent.)

No further business appearing, the House of Delegates adjourned until Friday morning at seven o'clock.

THOMAS A. HENDRICKS,
Executive Secretary.

HOUSE OF DELEGATES

SECOND MEETING

(Evansville Session, September, 1929)

The Friday morning (breakfast) meeting of the House of Delegates was held in the Pompeian room of the Hotel McCurdy at seven o'clock, the president, Dr. Charles E. Gillepsie, presiding.

Roll call by Dr. George D. Miller showed eighty-three delegates present, and this constituting a quorum, the House of Delegates proceeded to the first order of business, the election of officers, which resulted as follows:

President-elect—A. B. Graham, Indianapolis.

Treasurer—Wm. A. Doeppers, Indianapolis (re-elected).

Delegates to A. M. A. (2-year terms)—A. E. Bulson, Fort Wayne; F. S. Crockett, Lafayette.

Alternates—W. C. McFadden, Shelbyville; G. D. Scott, Sullivan.

Councilors: Tenth District—E. M. Shanklin, Hammond.

(The above councilor had been elected by his district, and the House of Delegates ratified his election. Councilors for the First, Fourth, Seventh and Thirteenth Districts were to be elected later.)

At this time the president presented the president-elect, Dr. A. B. Graham, of Indianapolis.

DR. A. B. GRAHAM: It is rather difficult, in fact it is impossible, for me to express in mere words the emotion which I experience at this present time. I beg to assure you that I appreciate this high honor which you have just conferred upon me. If you have chosen me for this position because of any oratorical ability which you believe I may possess you have erred. If, on the other hand, I have been selected because of the manner in which I have conducted myself in the practice of medicine for the past thirty-five years, I beg to assure you that I will make every endeavor to maintain the high ideals of my predecessors. (Applause.)

THE PRESIDENT: The selection of a place for the 1930 session is now in order.

DR. J. M. PULLIAM: The principal city of Indiana, Fort Wayne, invites this society to meet there next year. There is ample room to hold all the meetings in one building, also sufficient room for the exhibits. We have four first class hotels which will accommodate two thousand people, amply able to care for this convention. We

have five golf courses, and you don't need elevators to get around them. Fort Wayne hasn't had the Association for fourteen years. We would be very pleased to have you come to Fort Wayne next year.

The secretary was asked to read a letter from W. C. Geake, mayor of Fort Wayne, inviting the Association to meet at Fort Wayne in 1930. He also read the following letter from the Chamber of Commerce, of Fort Wayne:

"September 24, 1929.

"To the Indiana State Medical Association in Convention Assembled:

"Gentlemen:

"In behalf of the Fort Wayne Chamber of Commerce with its 2,000 members and occupying its own building, we wish to extend a most cordial invitation to your convention to consider Fort Wayne for your 1930 meeting place.

"It may interest you to know that Fort Wayne this year will entertain over 25,000 convention delegates. The largest convention we had this year had 5,000 delegates as a minimum, so you can readily see we can take care of a smaller group in a very satisfactory manner.

"We have three modern hotels, two of them new, offering 1,000 rooms with every luxury. In addition to these, Fort Wayne has fourteen other hotels of smaller room capacity and not so modern. This convention bureau guarantees *no advance in hotel rates*. Meeting, assembly and exhibit facilities of the Anthony hotel, best suited as headquarters, are adequate for your convention. The ballroom for business sessions, the main dining rooms for business sessions, and smaller committee rooms are offered free of charge to you. All meeting rooms of the Chamber of Commerce (including one large one) also will be offered the convention free of charge.

"A sight-seeing and pleasure tour of the city in large motor coaches will be offered, courtesy of the Chamber of Commerce, to all convention delegates who wish to see Fort Wayne's historic points, industries, parks, hospitals and other points of interest. This city was one of the five original portages of the United States, and a spot selected by President George Washington early in his administration as the central point for western colonization. It has been the scene of some tremendous Indian struggles and many of these points of interest are marked in this community.

"Golf tournaments can be arranged at the Fort Wayne Country Club, and the new eighteen-hole Elks' Golf Club—two of the finest courses in the state of Indiana.

"An escorted shopping tour of Fort Wayne's largest stores can be arranged for the visiting ladies.

"A bridge tea can be arranged for the ladies one afternoon. Details to be worked out later.

"Other entertainment features will of course be in direct charge of the Fort Wayne-Allen County Medical Society, who will act as host to their fellow Hoosier physicians.

"Advance bulletins, etc., going to members throughout the state, announcing the convention and program of events at Fort Wayne, will be made up, multigraphed, addressed, stamped and mailed free of charge by this office. The purpose of this work, of course, is to stimulate attendance at the convention.

"Your convention in Fort Wayne next year is bound to meet with the hearty approval of the exhibiting firms who show their lines at your conventions. Thus they will be contacting physicians in a new section of the state—bringing their goods to the attention of hundreds of medical men in northeastern Indiana who have not attended your convention held in southern, central or northwestern Indiana.

"Recent additional hospital facilities in Fort Wayne, built within the last two years, and costing over a million dollars, will be of great interest to many in your membership.

"Fort Wayne has everything for your entertainment that you would expect to find in a progressive Hoosier

city of 140,000 population. A week spent here will be a most delightful one. The latchstring is out to you.

"Yours for a great convention in 1930,

"FORT WAYNE CHAMBER OF COMMERCE,
Convention Bureau."

DR. H. H. WHEELER (Indianapolis): We extend an invitation for you to meet at Indianapolis in 1930.

DR. J. B. ROGERS (Michigan City): We invite you to come to Michigan City next year. We can at this time easily accommodate 2,000.

Ballot vote on place of 1930 session resulted as follows:

Fort Wayne	54 votes
Indianapolis	18 votes
Michigan City	11 votes

THE PRESIDENT: Fort Wayne is the meeting place for 1930. (Taken by consent.)

REPORTS OF REFERENCE COMMITTEES

Reference Committee on Sections and Section Work, DR. J. M. PULLIAM, Chairman: I move that the report of the Committee on Scientific Work be accepted as satisfactory to this House of Delegates. Motion duly seconded and carried.

Reference Committee on Rules and Order of Business. No report made at this time.

Reference Committee on Medical Education and Hospitals, DR. O. G. BRUBAKER, Chairman: There is nothing before this committee except the report of the standing committee on Medical Education and Hospitals. I move you that this report as printed in THE JOURNAL and the handbook of the House of Delegates be accepted. Motion duly seconded and carried.

Reference Committee on Public Policy and Legislation, DR. T. Z. BALL, Chairman: Your committee makes the following motion:

(1) That the report of the standing committee on Public Policy and Legislation as printed in THE JOURNAL be adopted;

(2) That the resolution regarding the pay physicians receive for their services in insanity inquests be referred to the attorney of the Indiana State Medical Association, to be reported to the Legislative Committee later on;

(3) That the report of the standing committee on Industrial and Civic Relations, as printed in THE JOURNAL, be adopted; and

(4) That the resolution of commendation on the work of the Committee on Public Policy and Legislation be adopted.

Moved by Dr. F. W. Cregor that the entire report of the Reference Committee on Public Policy and Legislation be adopted. Motion seconded and carried.

Reference Committee on Publicity, DR. W. C. McFADDEN, Chairman: Your committee most heartily commends the report of this standing committee on Publicity and recommends its adoption. Also, we recommend the adoption of the resolution introduced by Dr. F. W. Cregor to establish a department for preparing Archives of Medical History of Indiana. Motion seconded and carried.

Reference Committee on Hygiene and Public Health, DR. W. F. CARVER, Chairman: We recommend the adoption of the report of the Diphtheria Committee. Motion seconded and carried.

Reference Committee on Amendments to Constitution and By-Laws, DR. A. C. YODER, Chairman: We have the following amendment to the By-Laws before this committee:

"Section 16. Medical defense as provided for by this Association shall be available to members, under the terms stated in these By-Laws, only in the defense of civil actions for malpractice."

September 26, 1929.

To the House of Delegates of the Indiana State Medical Association:

Your Committee on Amendments to the Constitution

and By-Laws move the adoption of the above amendment.

A. C. YODER, Chairman,
A. L. MARSHALL,
H. S. LEONARD.

Motion seconded and carried.

Reference Committee on the Reports of Officers:

To the House of Delegates of the Indiana State Medical Association:

The Reference Committee on the Reports of Officers desires to report that we have read each of the reports printed in the handbook of the House of Delegates and desires to congratulate each of the officers for the splendid services rendered the State Association during the period covered.

We move that each report be approved as printed and that each officer be thanked for the character of the work done by him.

GEORGE R. DANIELS, Chairman.

Motion seconded and carried.

Reference Committee on Credentials: Moved and seconded that the report of this committee as printed in THE JOURNAL be accepted. Motion carried.

Reference Committee on Miscellaneous Business:

Evansville, Ind., Sept. 27, 1929.

House of Delegates:

Gentlemen:—Your Committee on Miscellaneous Business begs to report that we recommend the adoption of Dr. Richardson's report on Necrology and that he be commended for his zeal in the prosecution of this work.

In the matter of a request from the Woman's Auxiliary that an advisory council be appointed from this body for their assistance, we recommend that their request be granted.

Respectfully submitted,

E. C. TOTTEN, Chairman,
J. T. OLIPHANT,
G. J. GEISLER,
GRANT MARKLE.

Report adopted.

Report of Legislative Committee on Pulliam Resolution:

DR. J. M. PULLIAM: The Legislative Committee recommend in their report that the private laboratories appoint a committee to interview the State Board of Health and that this committee report back to the committee already standing. I move you that the report of this committee be accepted and that the committee which the private laboratories appoint to meet with the State Board of Health, report back to the Legislative Committee and this committee report back to the House. Motion seconded and unanimously carried.

At this time the president introduced Dr. W. R. Davidson, the new secretary of the State Board of Registration and Examination, who spoke of the activities of the Board and praised the retiring secretary, Dr. E. M. Shanklin, for his untiring efforts and splendid work.

DR. M. N. HADLEY: This House of Delegates owes to Dr. Shanklin a vote of appreciation. We in Indianapolis are pleased with the work done by the Indianapolis Better Business Bureau, and the decision of the Board in regard to the Root Cancer Hospital. I feel that the House of Delegates owes Dr. Shanklin a resolution of appreciation, and I make this motion. (Taken by consent.)

DR. W. R. DAVIDSON: This Association owes a vote of thanks to the Indianapolis Better Business Bureau for its work on the Root Cancer Hospital. In the first place about \$5,000 was spent on that case.

DR. GEORGE R. DANIELS: I move that the Better Business Bureau of Indianapolis be complimented for its activity in this particular matter. Motion seconded and carried.

FORMAL RESOLUTIONS OF APPRECIATION

DR. A. E. BULSON: I want to extend the customary resolution of appreciation to the Vanderburgh County Medical Society, Woman's Auxiliary of the Vanderburgh County Medical Society, the Evansville Chamber of

Commerce, Harold VanOrman, owner of this hotel, the newspapers and press associations, and our retiring president; and I think in view of the fact that they put row boats at our disposal, the manager of the row boat company should be mentioned in this resolution. Resolution unanimously passed.

DR. F. W. CREGOR: Who is the liaison committee for the Woman's Auxiliary? It occurs to me that the Publicity Committee of the State Association would be a very satisfactory committee.

DR. CHARLES E. GILLESPIE: I want to assure you gentlemen that it has been a pleasure and honor to act as your president.

No further business appearing the House of Delegates adjourned *sine die*.

THOMAS A. HENDRICKS,
Executive Secretary.

THE COUNCIL FIRST MEETING

(Evansville Session, September, 1929)

The Council convened at 3 p. m. Wednesday, September 25, 1929, in Room 227, Hotel McCurdy, Evansville, Indiana.

Call to order.

In the absence of the chairman the meeting was called to order by C. E. Gillespie, president of the Association, and the roll-call showed the following present:

Councilors:

- 1st District—John H. Hare, Evansville.
- 2nd District—G. D. Scott, Sullivan.
- 3rd District—Walter Leach, New Albany.
- 4th District—H. P. Graessle, Seymour.
- 5th District—O. O. Alexander, Terre Haute.
- 6th District—B. G. Keeney, Shelbyville.
- 7th District—E. E. Padgett, Indianapolis.
- 8th District—M. A. Austin, Anderson.
- 11th District—Ira E. Perry, North Manchester.
- 13th District—H. M. Hall, New Carlisle.

Officers:

- C. E. Gillespie, President.
- W. A. Doeppers, Treasurer.
- Thomas A. Hendricks, Executive Secretary.

Election of New Chairman: The resignation of E. E. Evans, of Gary, Chairman of the Council, was read and accepted with many words of praise for Dr. Evans on the part of the individual councilors. Dr. Evans' letter of resignation in part is as follows: * * * "As my new job made it impossible for me to take the time to attend meetings, I also had to resign my membership in Kiwanis, and as a member of the Board of Directors of the Gary Chamber of Commerce. This I disliked to do, but it didn't begin to be as hard as to resign as Councilor. I do appreciate the honor of having been elected as Chairman of the Council of the Indiana State Medical Association, and believe it to be the highest honor that I shall ever have during my life time, and I doubt if you will appreciate the regret with which I resign that office."

"I hope that you, the officers, and the members of the Council, will remember me with kindly feelings, and I hope that I may always retain your friendship."

Dr. E. E. Padgett, of Indianapolis, was elected to fill the unexpired term of Dr. Evans, which runs to January 1, 1930.

A letter of resignation was received from J. H. Weinstein, of Terre Haute, who has been in continuous service as councilor for twenty-four years, except for the interruption of the World War. Dr. Weinstein was succeeded by Dr. O. O. Alexander, who has been chosen to fill the unexpired term as Councilor for the Fifth District. The Council expressed its regrets over the loss of such a valuable man as Dr. Weinstein, but welcomed Dr. Alexander into the fold.

Minutes of Mid-winter Meeting: The minutes of the mid-winter meeting of the Council, held December 20 at

the Indianapolis Athletic Club, Indianapolis, were approved.

District Reports: As each councilor had made a short, informal report concerning matters in his own district in the September number of THE JOURNAL, and as no further comments, additions or changes were made, these reports stand as originally printed.

Complaint Against Riley Hospital Bulletins: Dr. M. A. Austin, Councilor for the Eighth District, called the attention of the Council to the fact that the Executive Committee had made no report to the Council concerning the complaint of the Council at the midwinter meeting against "propaganda", in the form of bulletins going to the lay public, in regard to cures being effected at the Riley Hospital. Dr. Myers was to make this report to the Executive Committee. The Council instructed the Executive Secretary to notify Dr. B. D. Myers that his report concerning these bulletins should be ready for the next mid-winter meeting of the Council. Dr. Austin cited a number of cases where patients had been sent to the Riley Hospital who were not indigent, and who cost the county from which they came a great deal of money. He said that two-thirds of the patients who go from his county to the Riley Hospital are not indigent and should not be sent there. Dr. Scott said that there was an understanding in his county that before a doctor signed any commitment papers to the Riley Hospital that this matter should be brought before the county medical society except in emergency cases. Dr. Scott pointed out an instance where an official in his district sent a member of his family to the Riley Hospital without the papers being signed by any physician. Dr. Doeppers spoke of the fact that the staffs of the various hospitals of the state point with pride to the charity work done at home, and said that unless cases were of unusual scientific significance and hence valuable for instruction purposes at the Indiana University School of Medicine, that these cases should be kept at the county hospitals and should not be sent to the state university hospitals. He felt sure that cooperation along this line could be received from the State Hospital Association. He recommended that the Executive Committee make a thorough investigation into this matter. Dr. Graessle said, "Someone is creating an impression among the laity that everyone is entitled to get free service at the Riley Hospital, and that better service can be had there than any place else in the state. Someone is responsible for this propaganda and the Executive Committee should find out who it is." Dr. Keeney made the motion that the Executive Committee be informed as to the feeling of the members of the Council upon this matter, and that the Executive Committee should make a thorough investigation of this subject and explain the present status of affairs to the Council at the mid-winter meeting.

Technical Exhibit: The preliminary financial report upon the technical exhibits showed there were twenty-six exhibits, including *Hygeia*. All money for the technical exhibits has been collected.

A scientific exhibit was an added feature to this year's program also.

New Secretary for the State Board of Medical Registration and Examination: Announcement was made that Dr. William R. Davidson, of Evansville, was elected secretary of the State Board of Medical Registration and Examination to succeed Dr. E. M. Shanklin.

Liaison Committee: Motion made and carried that the liaison, or contact, committee be made a permanent organization to act informally when called upon by state or government officials. This committee is to be appointed by the chairman of the Council.

Request for Committee by Woman's Auxiliary: Letter received from Mrs. William R. Davidson, president of the Woman's Auxiliary to the Indiana State Medical Association, asking that an official advisory council be appointed by the Indiana State Medical Association to

act with the Auxiliary. The Council referred this matter to the House of Delegates.

EXPENSES FOR SECRETARIES FOR ANNUAL CONFERENCE

The following resolution was presented to the Council by A. M. Mitchell, chairman of the Secretaries' Conference Committee:

"WHEREAS, the secretaries of the county societies have formed a permanent secretaries' organization, and

"WHEREAS, the work of the secretaries is for the benefit of the county society and the profession as a whole, and attendance at special meetings is an obligation, and

"WHEREAS, the secretaries act without salary and are compelled to pay their own expenses attending these special meetings,

"THEREFORE BE IT RESOLVED, That their actual expenses be paid out of the general fund of the Indiana State Medical Association for attendance at the mid-winter meeting, in a sum not to exceed twenty-five dollars (\$25.00) each, and

"BE IT FURTHER RESOLVED, That said payment be made only upon presentation of receipted bills for transportation, maintenance, etc."

The Council moved to instruct the Budget Committee that the railroad fare of secretaries be paid to the meeting which is to be held at Chicago the spring of 1930, the entire amount so expended not to exceed \$1,000. This would not include the expenses of councilors or officers of the Association.

There being no further business, the meeting was adjourned.

THOMAS A. HENDRICKS,
Executive Secretary.

THE COUNCIL

SECOND MEETING

(Evansville Session, September, 1929)

The second meeting of the Council was held directly following the breakfast meeting of the House of Delegates, at 9 o'clock, Friday, September 27, on the veranda of the Hotel McCurdy, Evansville, Indiana.

Call to Order:

The meeting was called to order by E. E. Padgett, chairman, and the roll-call showed the following members present:

Councilors:

- 1st District—John H. Hare, Evansville.
- 2nd District—G. D. Scott, Sullivan.
- 3rd District—Walter Leach, New Albany.
- 4th District—H. P. Graessle, Seymour.
- 5th District—O. O. Alexander, Terre Haute.
- 6th District—B. G. Keeney, Shelbyville.
- 7th District—E. E. Padgett, Indianapolis.
- 8th District—M. A. Austin, Anderson.
- 9th District—F. S. Crockett, Lafayette.
- 13th District—H. M. Hall, New Carlisle.

Officers:

C. E. Gillespie, President.

The date of the mid-winter meeting of the Council was set for Thursday, December 19, 1929.

Question Referred to Council by Executive Committee:

The questions referred to the Council by the Executive Committee in regard to the State Board of Health were deferred until the mid-winter meeting of the Council. These questions were upon the following points:

1. Policy of the State Board of Health in giving tubercular cases to the Indiana Tuberculosis Association.
2. The functions of the Public Health Nurses in various counties. (See report of the Executive Committee published in the September number of THE JOURNAL in regard to details concerning these two questions.)

There being no further business the meeting was adjourned.

THOMAS A. HENDRICKS,
Executive Secretary.

MINUTES OF THE GENERAL MEETING

THURSDAY, SEPTEMBER 26

(Evansville Session, September, 1929)

The General Meeting was held in the ballroom of the Hotel McCurdy, convening at 8:30 a. m. Thursday, September 26, with the president, Dr. Charles E. Gillespie, in the chair.

Dr. Gardner Johnson, of Evansville, introduced U. H. Seiler, Deputy Comptroller of Evansville, who gave the address of welcome. Following this the president read his address, which was entitled "The High Peaks of Medical History".

Dr. John Shelton Horsley, of Richmond, Virginia, then presented a paper on "The Modern Methods of Pre-operative and Post-operative Treatment in Surgical Cases". Discussants of this subject were Frank C. Walker, M.D., Indianapolis; Wm. C. Moore, M.D., Muncie; Charles Stoltz, M.D., South Bend; Simon Scherer, M.D., Martinsville, and J. Y. Welborn, M.D., Evansville.

The next speaker on the program, Dr. Harold S. Hatch, of Indianapolis, read on the subject of "The Diagnosis of Allergic Diseases".

Dr. Arthur J. Cramp, director of the Bureau of Investigation of the American Medical Association, talked on "Medical Frauds".

"Arthritis" was the subject of the illustrated talk by Dr. Ralph Pemberton, associate professor of medicine, Graduate School, University of Pennsylvania.

Dr. Marcus Ravdin, of Evansville, concluded the program of the general meeting with a paper on "The Influence of Accessory Sinus Disease on General Systemic Disturbances".

THOMAS A. HENDRICKS,
Executive Secretary.

MINUTES OF SECTION ON SURGERY

THURSDAY, SEPTEMBER 26

FIRST MEETING

(Evansville Session, September, 1929)

Meeting was called to order at 2 p. m., Thursday, September 26th, by chairman of the Surgical Section, Ernest Rupel, M.D., of Indianapolis, at the Hotel McCurdy.

The first speaker on the program was Joseph H. Weinstein, M.D., Terre Haute, whose subject was "The Value of Fahræus Reaction in Gynecology." The discussants were W. N. Rowley, M.D., Kokomo; Carl Habich, M.D., Indianapolis, and David A. Bickel, M.D., South Bend.

H. F. Beckman, M.D., of Indianapolis, gave a talk on "The First Stage of Labor, a Harvest of the Preceding Sins of Omission and the Seeding of the Sins of Commission of the Second Stage," which was illustrated by pictures. The subject was discussed by David A. Bickel, M.D., of South Bend.

Frank H. Lahey, M.D., of Boston, was the next speaker. He gave an extensive and interesting lecture on "The Management of Goiter". This also was illustrated by pictures. The paper was discussed by W. D. Gatch, M.D., of Indianapolis, and Dr. Lahey closed the discussion.

"Treatment of Scirrhus Lesions of the Stomach and Duodenum" was the subject presented by Eli Sherman Jones, M.D., Hammond, which also was accompanied by illustrations. Jacob K. Berman, M.D., of Indianapolis; B. L. Harrison, M.D., Newcastle; E. E. Padgett, M.D., Indianapolis; Frank H. Lahey, M.D., Boston, discussed the subject, and the discussion was closed by Dr. Jones.

Election of officers of this section for 1930 resulted as follows:

Chairman, H. C. Ruddick, M.D., Evansville.

Vice-chairman, E. B. Ruschli, M.D., Lafayette.

Secretary, George A. Collett, M.D., Crawfordsville.

The meeting then adjourned to convene the following morning at nine o'clock.

CLEON A. NAFE, M.D.,
Section Secretary.

MINUTES OF SECTION ON SURGERY FRIDAY, SEPTEMBER 27

SECOND MEETING

(Evansville Session, September, 1929)

Meeting called to order at 9 a. m. at the Hotel McCurdy by the chairman of the Surgical Section, Ernest Rupel, M.D., Indianapolis.

The first paper was by Sumner L. Koch, M.D., of Chicago, his subject being "Infection of the Hand." Discussed by Ray G. Ikens, M.D., Lafayette; George A. Collett, M.D., Crawfordsville; H. C. Allen, M.D., Indianapolis, and G. D. Scott, M.D., Sullivan.

"Some Observations on the Use of Sodium Iso-Amyl-ethyl Barbiturate" was presented by Joseph McCullom, M.D., Indianapolis, and discussed by Frank S. Crockett, M.D., Lafayette; H. M. Trussler, M.D., Indianapolis, and W. L. Owen, M.D., South Bend. Dr. McCullom closed the discussion.

The next speaker was John T. Short, M.D., of Fort Wayne, whose subject was "Carcinoma of the Bladder." R. R. Acre, M.D., Evansville, and Frank S. Crockett, M.D., Lafayette, discussed the subject.

A paper on "Blood Vessel Surgery" was presented by James Y. Welborn, M.D., of Evansville.

There being no further business, the meeting was adjourned.

CLEON A. NAFE, M.D.,
Section Secretary.

MINUTES OF THE SECTION ON MEDICINE THURSDAY, SEPTEMBER 26

FIRST MEETING

(Evansville Session, September, 1929)

The Thursday afternoon meeting of the Section on Medicine convened at 1:30, Dr. Roscoe H. Beeson, of Muncie, chairman of the Section, presiding.

The first speaker on the program was Walter Clement Alvarez, M.D., Mayo Clinic, Rochester, Minnesota, who spoke on "What Shall We Do for the Patient with Nervous Indigestion?" Discussed by A. B. Graham, M.D., Indianapolis; J. Matthew Pulliam, M.D., Fort Wayne, and Lindsey Morrison, M.D., Hammond.

The second paper read was that of Robert M. Moore, M.D., Indianapolis, on "Subacute Bacterial Endocarditis—Some Clinical Observations." Discussed by Edgar F. Kiser, M.D., Indianapolis, and George S. Bond, M.D., Indianapolis.

The next speaker was Edward Clay Mitchell, M.D., professor of pediatrics, University of Tennessee College of Medicine, Memphis, Tennessee. His subject, illustrated with lantern slides, was "Vomiting Problems in Children." No discussion.

"Hypertension in Relation to Industrial Employment" was the subject presented by James O. Ritchey, M.D., of Indianapolis. Harry W. Garton, M.D., of Fort Wayne, physician for the General Electric Company, and F. B. Wishard, M.D., of Anderson, physician for the Delco-Remy Company, were the discussants of this paper.

Adjourned.

HARVEY L. MURDOCK, M.D.,
Section Secretary.

MINUTES OF THE SECTION ON MEDICINE FRIDAY, SEPTEMBER 27

SECOND MEETING

The meeting was called to order at 8:30 a. m. in the Moose Hall, by Dr. Roscoe H. Beeson, of Muncie, chairman of the Medical Section.

The first paper presented was that of Elliott P. Joslin, M.D., professor of clinical medicine, Harvard University Medical School, Boston, on the subject of "The Abolition of Diabetic Coma in the United States." Discussed by Cecil L. Rudesill, M.D., of Indianapolis.

Francis Eugene Senear, M.D., professor of dermatology, University of Illinois College of Medicine, Chicago, Illinois, was the next speaker, his subject being "Cutaneous Tuberculosis and General Medicine."

Discussed by John H. Gilpin, M.D., Fort Wayne, and F. W. Cregor, M. D., Indianapolis.

"Some Psychiatric Problems in Children" was the subject of the paper presented by Max A. Bahr, M.D., superintendent Central Indiana Hospital for Insane, Indianapolis. Discussed by J. Matthew Pulliam, M.D., Fort Wayne, and L. Potter Harshman, M.D., Fort Wayne.

Election of section officers for 1930 resulted as follows:

Chairman—Dr. Robert M. Moore, Indianapolis.

Vice-chairman—Dr. Herman Baker, Evansville.

Secretary—Dr. Harvey L. Murdock, Fort Wayne.

There being no further business, the meeting was adjourned.

HARVEY L. MURDOCK, M.D.,
Section Secretary.

MINUTES OF THE SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY THURSDAY, SEPTEMBER 26

FIRST MEETING

(Evansville Session, September, 1929)

The Thursday afternoon meeting of the Section on Ophthalmology and Otolaryngology was called to order in Room 277 on the mezzanine floor of the Hotel McCurdy by Dr. H. C. Knapp, of Huntingburg, chairman of the Section, who gave a short address.

Following this, Meyer Wiener, M.D., associate professor of clinical ophthalmology, Washington University School of Medicine, St. Louis, Missouri, and a guest of the Section, presented a paper the subject of which was "Some Points on Cosmetic Surgery of the Eye." This talk was illustrated with blackboard demonstration and lantern slides. Discussed by L. D. Brose, M.D., Evansville, and Albert E. Bulson, M.D., Fort Wayne.

Hugh A. Kuhn, M.D., Hammond, read a paper on "The Treatment of Glaucoma." Discussed by Meyer Wiener, M.D., St. Louis; John R. Gillum, M.D., Terre Haute, and B. D. Ravdin, M.D., Evansville.

Four eye case reports then were given, the speakers and subjects being as follows:

C. J. Adams, M.D., Kokomo,

Interesting Eye Injury.

John R. Gillum, M.D., Terre Haute,

Case of Pulsating Exophthalmos.

C. P. Clark, M.D., Indianapolis,

Disseminated Syphilitic Chorio-Retinitis with lantern slides.

O. G. Brubaker, M.D., North Manchester,

Acute Iridocyclitis: Posterior Synechia.

Adjournment.

B. D. RAVDIN, M.D.,
Section Secretary.

MINUTES OF THE SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY FRIDAY, SEPTEMBER 27

SECOND MEETING

(Evansville Session, September, 1929)

The Friday morning meeting of the Section on Ophthalmology and Otolaryngology convened at 9 o'clock on the mezzanine floor of the Hotel McCurdy, Dr. H. C. Knapp, of Huntingburg, chairman of the Section, presiding.

The first speaker of the morning was J. A. Stucky, M.D., of Lexington, Kentucky, guest of the Section, who presented a paper on "Some Unsolved Problems in Ophthalmology and Otolaryngology." Discussed by C. A. Robinson, M.D., Frankfort; John W. Carmack, M.D., Indianapolis; F. V. Overman, M.D., Indianapolis, and C. E. Gillespie, M.D., Seymour.

D. O. KEARBY, M.D., of Indianapolis, then read a paper on "A Study of 100 Cases of Suppurative Maxillary Sinusitis—Symptomatology, Diagnosis and Treat-

ment." Discussed by Harmon L. Stanton, M.D., Evansville; Albert E. Bulson, M.D., Fort Wayne; B. D. Ravdin, M.D., Evansville, and W. S. Tomlin, M.D., Indianapolis.

Election of section officers for 1930 resulted as follows:

Chairman—B. D. Ravdin, M.D., Evansville.

Vice-chairman—D. S. Adams, M.D., Indianapolis.

Secretary—C. A. Robison, M.D., Frankfort.

Four ear, nose and throat case reports then were given, the speakers and their subjects being as follows:

J. W. Carmack, M.D., Indianapolis.

Sinusitis, chronic polypoid, atrophic type.

Multiplicity of coexisting diseases.

Emphasis on diagnosis.

Albert E. Bulson, M.D., Fort Wayne.

Cerebrospinal Rhinorrhea of Traumatic Origin.

E. L. Lingeman, M.D., Indianapolis.

Osteoma of the Frontal Sinus.

J. W. Wright, M.D., Indianapolis.

Acute Mastoiditis with Some Interesting

Features and Pictures.

There being no further business, the meeting was adjourned.

B. D. RAVDIN, M.D.,
Section Secretary.

BUREAU OF PUBLICITY

August 30, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; C. P. Emerson, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held August 23 read and approved.

The release, "Preparation of Children for School," read and approved for publication Saturday, September 7, 1929.

The radio release, "Preparation of Children for School," was approved for broadcast Saturday, August 31.

The executive secretary reported that the annual report of the Bureau had been sent to the editor of THE JOURNAL along with the request that a proof be sent to the chairman.

Letter received from the Committee on the Cost of Medical Care. This letter was to be taken up in detail at a later period.

The following letter also was received from the Committee on the Cost of Medical Care:

"Permit me to express the thanks of the Committee on the Cost of Medical Care for the co-operation of your Society in the work which we have been carrying on in Shelby County, Indiana. Due to the help of your secretary and the Committee on Publicity, as well as the local County Medical Society, no difficulties of any sort were encountered—in fact, the local physicians were in every way cordial and helpful."

The following request for speaker was received:

September 3—Anderson Rotary Club, Anderson, Ind.
Letter received from the executive secretary of the Indiana State Nurses Association asking the executive secretary of the Indiana State Medical Association to serve on the American Journal of Nursing Contest Committee to judge essays.

The following bill was approved for payment:

Central Press Clipping Service.....\$6.03

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole September 6, 1929.

INDIANA STATE BOARD OF HEALTH DIVISION OF COMMUNICABLE DISEASES MONTHLY REPORT, SEPTEMBER, 1929

Morbidity reports were received from sixty-three counties in the state during the month. Eighty-two counties sent in either positive or negative report cards. Ten counties, namely, Brown, Franklin, Fulton, Jennings, Noble, Newton, Pulaski, Washington, Wells and Whitley did not report. Three hundred seventy-five negative report cards were received. The reports show a morbidity increase over the previous month, except smallpox and scarlet fever.

Smallpox is perennial in Indiana. The decrease over the previous month was fifty-three cases. There were 114 cases reported in August. Fewer cases of the disease are reported in September than any month of the year. The estimated expectancy was forty-three cases. The estimated expectancy is based upon the experience of the last seven years, including epidemics.

Scarlet fever shows a decline, 132 cases reported; 190 cases the preceding month. The corresponding month last year 133 cases. The normal estimate for September is 131 cases. These cases were scattered over thirty-four counties. The greatest number of cases were reported from Marion and Lake Counties, 26 cases and 17 cases, respectively.

Typhoid Fever. Forty-four cases reported as against forty-three cases the previous month. Eighty-four cases were reported in September of the preceding year. The estimated expectancy for September is 136 cases. The disease is on the decline. It should, in the face of all that is being done to eradicate it, namely, pure water and milk, protection against insects and serum immunization. Control the human carrier and the task will be accomplished.

Diphtheria shows a marked increase. Eighty-five cases were reported. Sixty-three cases the preceding month. Last September 101 cases were reported. The estimated expectancy was 136 cases. The last week of this month thirty cases were reported. Much is being done concerning the prevention of the disease; much more will have to be done if the slogan, "No diphtheria at the close of 1931," is realized.

Measles is rather a negligible quantity during this time of the year. Twenty-three cases reported this month; nineteen cases last month. Thirty-two cases corresponding date last year. The estimated expectancy was thirty-seven cases.

Poliomyelitis. Seven cases were reported. Four cases in Marion county and one case each in Marshall, Ripley and St. Joseph counties.

Leprosy. One case in Gary. The disease was recognized by Dr. C. Julian, of Gary. The case was a man, Mexican, nasal infection, was isolated, escaped isolation and as far as was able to learn, he returned to Mexico.

During the month the director spoke to the Lake County Council relative to an appropriation for the control of the venereal diseases in the county, and attended the health officers' conference and the Indiana State Medical Association convention at Evansville.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

TIPPECANOE COUNTY MEDICAL SOCIETY

Lafayette, Indiana.
September 12, 1929.

The Tippecanoe County Medical Society met in regular session at the Lincoln Lodge. A very delicious chicken dinner was served at 6.15 P. M. to fifty-two physicians and dentists. Representatives were present from Crawfordsville, Frankfort, Delphi, Monticello, Reynolds, Wolcott, Mulberry, and Otterbein.

After the dinner the Society held the business meeting in the dancing room of the lodge. The minutes of

the previous meeting were read and approved. Communications were read; one from the State Secretary, urging attendance at the State Meeting at Evansville.

The applications for membership in our Society of Doctors R. R. Calvert and L. L. Nesbit were read for the first time.

A committee on resolutions composed of Drs. William Reser, Chas. Hupe and F. S. Crockett was appointed by the chairman to bring before the Society resolutions on the death of Dr. Wm. R. Moffitt. The resolutions were read and ordered published and filed in the usual manner.

Motion was made and carried that the Tippecanoe County Medical Society attend the funeral of Dr. Wm. R. Moffitt in a body.

The following bills were presented and allowed:

Perry, the Printer, letters.....	\$ 4.95
Dr. R. M. Campbell, postmaster, 1000 Env....	21.60
H. Roth, flowers.....	10.00
J. C. Burkle, hotel expenses and dinner for speaker	7.00

Total\$43.55

President Bayley introduced Dr. James G. Carr, who expressed himself as being very much pleased with his return to our district, having been here on previous occasions and enjoyed his visits very much. Doctor Carr very ably presented the subject "Uremia", taking it up from the standpoint of some causes, diagnosis and treatment. Dr. Carr emphasized the pre-uremic state at which time careful investigation can make the diagnosis which makes the treatment much easier. Diet and general care are the best remedies for your malady.

A rising vote of thanks was extended Dr. Carr for his very splendid address. A free and lively discussion was enjoyed by all.

Dr. Carr was accompanied by his wife on this trip. Mrs. Carr was entertained at the home of Dr. and Mrs. Crockett during the meeting at the lodge.

Motion to adjourn was carried.

Following the meeting Dr. Carr received many warm congratulations from the individual members.

WOMAN'S AUXILIARY TO THE INDIANA STATE MEDICAL ASSOCIATION

The Woman's Auxiliary to the Indiana State Medical Association held its second annual meeting at an eight o'clock breakfast, September 26th, in the Pompeian Room of the Hotel McCurdy at Terre Haute. As the wives of all the visiting doctors were welcome, there were one hundred and seventy-two seated at the tables.

The meeting was opened formally by the President, Mrs. W. R. Davidson, of Evansville. The minutes of the previous meeting were read by the Secretary, Mrs. Edgar Kiser, of Indianapolis. The Treasurer, Mrs. E. T. Zarling, of Terre Haute, reported that at the time of her election, there were no funds in the Treasury, but that having met all obligations, including national dues, and a deficit for the year book of the preceding year, there was a balance on hand of \$12.

The Auxiliary in Indiana at present has only six organizations. Marion, Madison, Carroll, Delaware, Vigo, and Vanderburgh counties being represented. Reports were read from all these.

Mrs. O. O. Alexander, the Hygeia Chairman, called attention to the Hygeia Exhibit, and the generous commission given for subscriptions.

The speaker for the morning was Dr. A. J. Cramp, Director of the Department of Investigation of the American Medical Association. His lecture, "Mrs. Gullible's Travels Through Cosmetic Land", was illustrated by slides. It is needless to say that his hearers found it all too short, and that, if Dr. Cramp had opened a Question Box, the session would have become a "protracted meeting."

Mrs. Frank W. Cregor, the first president of the organization, gave a report of the Portland Conference,

following her outline in the August Journal. As first vice-president of the Auxiliary to the American Medical Association, Mrs. Cregor has before her the task of organization. To assist in that work in Indiana, Mrs. A. C. Clauser, of Delphi, was chosen Extension Chairman.

At the executive meeting in the spring, an amendment for members-at-large was proposed. This was now presented and adopted. By the payment of the membership fee of \$1, the advantage of the Auxiliary, and the opportunity to assist in its work may be had by doctors' wives in those counties not yet having an organization. Immediately following this amendment, and the following paid the membership fee, and became members-at-large: Mrs. Ols Nesbit, Gary; Mrs. A. E. Bulson, Fort Wayne; Mrs. M. G. Youcum, Mentone; Mrs. W. A. Thompson, Liberty; Mrs. I. M. Sanders, Greensburg; Mrs. O. T. Scamahorn, and Mrs. W. H. Terrell, Pittsboro; Mrs. Charles Titus, Wilkinson; and Mrs. J. C. Burkle, West Lafayette.

The President-elect, Mrs. M. A. Austin, was introduced and responded graciously.

The National Auxiliary to the A. M. A. has urged repeatedly that each state and county organization ask its association or society for an Advisory Board. The President reported that a letter making such a request had been sent to the House of Delegates. Mrs. Frank W. Cregor, Mrs. M. A. Austin and Mrs. Wm. S. Tomlin were appointed as a committee to confer further with the chairman of the proper committee of the House as to the advantage of such a Board.

The Nominating Committee, through its chairman, Mrs. Arleigh Allenbaugh, of Evansville, presented the names of Mrs. Wm. S. Tomlin, of Indianapolis, President-elect; Mrs. Will C. Moore, Muncie, Secretary; and Mrs. Alvin E. Newman, Evansville, Treasurer. These were duly elected and introduced.

In her opening address, the President spoke of the fields on every hand throughout southern Indiana that were now being made ready for the winter wheat, and of the beauty of these same fields, as they lay ready for the harvest, in the late spring, and expressed the wish that they might be typical of what would follow this time of seed sowing for the Auxiliary movement in Indiana.

There is no doubt that the breakfast meeting did much to bring before the wives of the visiting doctors the purpose and advantage of the Auxiliary.

MRS. W. R. DAVIDSON, *President*

Woman's Auxiliary to Indiana State Medical Ass'n.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Any information concerning these books will be supplied on request. Books received since September 1, 1929:

GYNECOLOGIC TECHNIC. By Thomas H. Cherry, M.D., F. A. C. S., Professor of Gynecology, New York Post-Graduate Medical School and Hospital, etc. 678 pages with 558 half-tone and line engravings from photographs and pen and ink drawings by the author. Cloth. Price \$8.00. F. A. Davis Company, publishers, 1929.

STERILIZATION FOR HUMAN BETTERMENT. A summary of results of 6,000 operations in California, 1909 to 1929. By E. S. Gosney, B.S., LL.B. and Paul Popenoe, D.Sc. 202 pages. Cloth. Price \$2.00 The MacMillan Company, New York, 1929.

VARICOSE VEINS. With Special Reference to the Injection Treatment. By H. O. McPheeters, M.D., F.A.C.S., Director of the Varicose Vein and Ulcer Clinic, Minneapolis General Hospital. 208 pages illustrated with half-tone and line engravings. F. A. Davis Company, Publishers, Philadelphia. 1929.

MINOR SURGERY. By Frederick B. Christopher, M.D., Associate in Surgery at Northwestern University Medical School, Chicago. Foreword by Allen B. Kavel, M.D., Professor of Surgery, Northwestern University Medical School. Octavo of 694 pages with 465 illustrations. Cloth. Price \$8.00. W. B. Saunders Company, Philadelphia and London, 1929.

PRINCIPLES OF CHEMISTRY. An Introductory Text-book of Inorganic, Organic and Physiological Chemistry for Nurses and Students of Home Economics and Applied Chemistry. By Joseph H. Roe, Ph.D., Professor of Chemistry, George Washington University Medical School. Second edition. 427 pages. Cloth. Price \$2.50. C. V. Mosby Company, St. Louis, 1929.

MATERIA MEDICA FOR NURSES. By Edith P. Brodie, A.B., R.N., Director of School of Nursing, Vanderbilt University, Nashville, Tennessee. 283 pages. Third edition. Cloth. Price \$2.00. C. V. Mosby Company, St. Louis, 1929.

DIABETES MELLITUS. Treatment of with Higher Carbohydrate Diets. A Textbook for Physicians and Patients. By William David Sansum, M.S., M.D., F.A.C.P., Percival Allen Gray, Ph.D., M.D., and Ruth Bowden, B.S. 309 pages. Flexible binding. Price \$2.50. Harper and Brothers, publishers, New York and London, 1929.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

INHALANT EPHEDRINE (PLAIN)-LILLY.—A solution containing ephedrine-Lilly (New and Nonofficial Remedies, 1929, p. 166) 1 Gm.; cottonseed oil, 1 Gm.; perfumed and tinted, liquid petrolatum to make 100 cc. Eli Lilly & Co., Indianapolis.

HYPODERMIC TABLETS EPHEDRINE HYDROCHLORIDE-LILLY. 0.016 Gm. ($\frac{1}{4}$ GRAIN).—Each tablet contains ephedrine hydrochloride-Lilly (New and Nonofficial Remedies, 1929, p. 168), 0.016 Gm. Eli Lilly & Co., Indianapolis.

HYPODERMIC TABLETS EPHEDRINE HYDROCHLORIDE-LILLY. 0.0325 Gm. ($\frac{1}{2}$ GRAIN).—Each tablet contains ephedrine hydrochloride-Lilly (New and Nonofficial Remedies, 1929, p. 168), 0.0325 Gm. Eli Lilly & Co., Indianapolis.

HYPODERMIC TABLETS EPHEDRINE SULPHATE-LILLY. 0.016 Gm. ($\frac{1}{4}$ GRAIN).—Each tablet contains ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 0.016 Gm. Eli Lilly & Co., Indianapolis.

HYPODERMIC TABLETS EPHEDRINE SULPHATE-LILLY. 0.0325 Gm. ($\frac{1}{2}$ GRAIN).—Each tablet contains ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 0.0325 Gm. Eli Lilly & Co., Indianapolis.

SYRUP NO. 110 EPHEDRINE SULPHATE.—It contains ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 0.22 Gm., in 100 cc. (1 grain per fluid ounce) and alcohol 12 percent; flavored and tinted. Eli Lilly & Co., Indianapolis.

SYRUP NO. 111 EPHEDRINE SULPHATE.—It contains ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 0.44 Gm., in 100 cc. (2 grains per fluid ounce), alcohol, 12 percent; flavored and tinted. Eli Lilly & Co., Indianapolis.

NEOCINCHOPEN-B.P.C.—A brand of neocinchopen-N.N.R. For a discussion of the actions, uses and dosage, see New and Nonofficial Remedies, 1929, p. 114. Benzol Products Co., Newark, N. J. (*Journal of the A. M. A.*, August 17, 1929, p. 524).

VIOSTEROL.—Investigators discovered that ergosterol when subjected to ultraviolet radiation, develops an antirachitic (vitamin D) potency enormously greater than that of cod liver oil. For therapeutic use the ergosterol after irradiation is usually dissolved in a vegetable oil. The Council on Pharmacy and Chemistry has adopted the term viosterol to designate irradiated ergosterol, and viosterol in oil to designate a preparation containing this substance dissolved in oil. The Council has also

provisionally adopted the qualifying phrases 100 D, 5 D, etc., to designate the vitamin D potency of the various preparations as multiples of the vitamin D potency of good cod liver oil. Viosterol is for use in prophylaxis and treatment of rickets and, experimentally, in other conditions arising from faulty calcium and phosphorus assimilation. It should be borne in mind that viosterol does not contain vitamin A and that harm from hypercalcemia may result from the use of too large doses.

VIOSTEROL IN OIL 100 D.—Viosterol dissolved in a vegetable oil and standardized to contain 1,333 rat units of vitamin D in each Gm., this strength being 100 times that of a potent cod liver oil used as a standard. The daily prophylactic dose for the average infant and child is 8 to 10 drops (0.1233 to 0.1666 cc.: 2 $\frac{2}{3}$ to 3 $\frac{1}{3}$ minims). The marketed preparations are accompanied by a dropper designed to deliver 3 drops to the minim.

VIOSTEROL-ABBOTT.—A brand of viosterol in oil 100 D, N.N.R. Abbott Laboratories, North Chicago, Ill.

PARKE, DAVIS & CO'S VIOSTEROL.—A brand of viosterol in oil 100 D, N.N.R. Parke, Davis & Co., Detroit.

VIOSTEROL-SQUIBB.—A brand of viosterol in oil 100 D, N.N.R. E. R. Squibb & Sons, New York.

COD LIVER OIL WITH VIOSTEROL 5 D.—Viosterol dissolved in cod liver oil, the solution containing not less than 400 vitamin A units per Gm. when tested by the pharmacopeial method and 66.65 rat units of vitamin D per Gm., this antirachitic strength being five times that of a potent cod liver oil used as a standard. This product is proposed for use in conditions in which it is desired to supplement the administration of vitamin A with that of vitamin D. For infants and young children the dose is 2.5 to 3.3 cc. (53 to 67 minims) daily.

ABBOTT'S VIOSTEROL COD LIVER OIL.—A brand of cod liver oil with viosterol 5 D, N.N.R. Abbott Laboratories, North Chicago, Ill.

SQUIBB'S VIOSTEROL COD LIVER OIL 5 D.—A brand of cod liver oil with viosterol 5 D, N.N.R. E. R. Squibb & Sons, New York.

SQUIBB'S VIOSTEROL COD LIVER OIL 5 D MINT FLAVORED.—A brand of cod liver oil with viosterol 5 D, N.N.R. containing 0.67 percent of oil of spearmint as flavoring. E. R. Squibb & Sons, New York. (*Journal of the A. M. A.*, August 31, 1929, p. 693).

PROPAGANDA FOR REFORM

SOME ENERGEN FOODS NOT ACCEPTABLE FOR N.N.R.—The Council on Pharmacy and Chemistry reports that a line of "Energen" products, marketed by the Energen Foods Co., Ltd., England (Energen Foods Co., Inc., New York, distributor) was presented for consideration as "starch reduced" foods containing "an increased amount of protein in the form of gluten" and recommended for use in the dietetic treatment of "Diabetes, Obesity, Gastric and Intestinal troubles, in which it is essential to decrease the amount of starchy food, and in all conditions of debility or malnutrition where an increase of proteins is necessary." The Council found many unwarranted claims and other objectionable statements in the submitted advertising material. When these were reported to the firm, it stated that some of this advertising is no longer in use even in England and most of it has not been circulated in the United States. Assurance, however, was given that the advertising matter to which objection had been made has been discontinued or that it will be. The firm requested reconsideration, particularly of Energen Bread, submitting further advertising. After considering the further evidence, the Council declared Energen Bread, together with Energen Bismal, Energen Cocoa, Energen Digestive Biscuits, Energen Endobran Biscuits, Energen Gluten Semolina, Energen Gluten Tapioca, Energen Macaroni, Energen Pastry Flour, Energen Starch-Reduced Bread (Batons), Energen Starch-Reduced Bread with Casein (Batons), Energen Starch-Reduced Rolls, Energen Starch-Reduced Rusks, Energen Starch-Reduced Wheatmeal

Bread (Batons), unacceptable for New and Nonofficial Remedies because they are unscientific mixtures marketed with unwarranted therapeutic claims under names not correctly descriptive of their composition and in a way to invite their ill advised use by the public. (*Journal of the A. M. A.*, August 3, 1929, p. 381).

SODIPHENE NOT ACCEPTABLE FOR N.N.R.—The Council on Pharmacy and Chemistry reports that Sodiphene (Sodiphene Company, Kansas City, Mo.) is stated to have the following composition: "Phenol, 4 percent; sodium hydroxide, 1 percent; cassia oil 0.01 percent; witch hazel, 0.10 percent; boric acid, 0.08 percent; alcohol, 0.2 percent; wintergreen oil, trace." The Council finds that there is no evidence to indicate that, in the amounts present, the cassia oil, witch hazel, boric acid and alcohol have any therapeutic effect and the cassia oil evidently acts as a flavor only. The preparation must therefore be considered an alkaline phenol solution containing sodium phenolate rendered unscientific and needlessly complex by the addition of witch hazel and boric acid. Alkaline phenol solutions were in extensive use many years ago but have been generally abandoned. The preparation therefore is not only unscientific but it also lacks novelty, and extensive use of similar preparations has failed to demonstrate the usefulness of alkaline phenol preparations. The Council declared Sodiphene unacceptable for New and Nonofficial Remedies because it is an unscientific, needlessly complex mixture, marketed under a nondescriptive name, which presents no originality entitling it to a proprietary name and which is marketed without a statement of composition on the label and for which unwarranted claims are made. (*Journal of the A. M. A.*, August 3, 1929, p. 381).

THE HOXIDE QUACKERY AGAIN.—Three years ago the Hoxide cancer quackery was exploited in Taylorville, Illinois. It was sponsored by the Chamber of Commerce of that town. The "treatment"—secret of course—was administered by a concern known as the "Hoxide Institute". Now the Hoxide quackery has been resurrected in the hamlet of Girard, Illinois. Hoxsey, in the light of his previous experience, has not hesitated to enlist the aid of the Girard Chamber of Commerce. (*Journal of the A. M. A.*, August 3, 1929, p. 400).

BLOOD SUGAR TESTING OUTFITS.—The various blood sugar testing outfits on the market are, for the most part, satisfactory for clinical work, especially when one wishes to follow the blood sugar values from time to time. None of these instruments are as reliable as the special methods advanced in the literature, but most of them are based on the principles of these tests, so that the difference is largely one of degree of accuracy of the results. If one uses the same instrument or method on different specimens of the patient's blood, whatever error there may be in the outfit or method employed is introduced at each testing, so that the results obtained are comparable. It is hard to see how the Sheftel sugar test can yield anything more than a rough estimate of the sugar contents. The claim of a percentage of error of less than 0.1 percent is so ridiculous as to throw discredit on the originators. (*Journal of the A. M. A.*, August 3, 1929, p. 403).

A PYRORRHEA-CURE FRAUD.—For some years there has been advertised an alleged cure for pyorrhea, purporting to be the discovery of Dr. J. H. Cheek, "the Famous Pyorrhea Specialist". The postal authorities have now issued an order closing the mails to the Doctor Cheek's Laboratories, J. H. Cheek, D.D.S., president, and various other trade names used by the concern. The alleged treatment consisted, essentially, of a mouth wash, although there were accessories. The mouth wash was typical of its class, containing alcohol, glycerine, cresol, zinc chloride and the usual flavoring—thymol, eucalyptus, spearmint, etc.—colored with carmine and cudbear, and sweetened with saccharine. (*Journal of the A. M. A.*, August 10, 1929, p. 475).

A CANCER QUACK QUILTS.—The Indianapolis Cancer Hospital, long a disgrace not only to the state of In-

diana but also to the middle west, has closed its doors, and a receiver was appointed for the outfit by the circuit court. Charles C. Root, M.D., the medical director of the concern, is reported to have disappeared. The outfit was originally known as the Parkview Sanatorium and later called the Leach Sanatorium. The closing of the hospital has been brought about by the activity of the Indianapolis Better Business Bureau and its manager, Mr. T. M. Overley; they collected evidence which permitted the investigation. Specimens of what quack Root called his "Liquid Laboratory Product" which was said to be injected into the cancer, was examined in the A. M. A. Chemical Laboratory and found to contain zinc chloride as its essential drug. (*Journal of the A. M. A.*, August 17, 1929, p. 564).

THE ACTION OF DIGITALIS IN HEART FAILURE.—Clinicians have generally accepted the pharmacologic evidence that digitalis causes a more vigorous and larger ventricular contraction. But it is difficult to accept the view that a muscle such as the heart, which cannot rest after being overstimulated, is improved by being forced to beat harder. It has now been shown that the efficiency of the heart, or its capacity for doing a fixed amount of work with least oxygen consumption, varies inversely with its diastolic volume. It was shown further that digitalis causes the heart to decrease its diastolic volume while carrying a constant load. Thus, digitalis reduces the energy requirement of the heart or permits it to do more work with the same expenditure of energy. (*Journal of the A. M. A.*, August 17, 1929, p. 548).

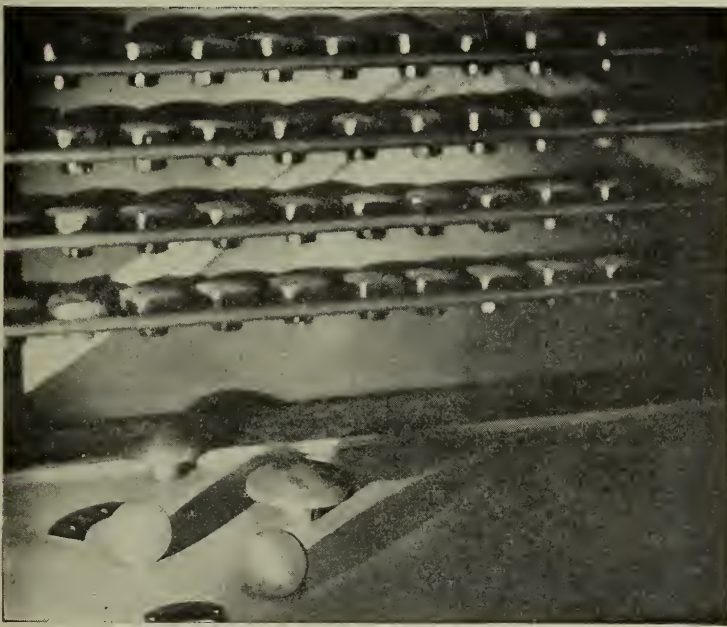
ACQUIRED POLLEN HYPERSENSITIVENESS.—In order to account for acquired pollen hypersensitiveness, clinicians usually assume that at some previous time the patient has inhaled, has swallowed or otherwise has been inoculated with a specific pollen. According to this hypothetical etiology the patient should be equally hypersensitive to the individual proteins of this pollen, assuming, of course, that these proteins are all equally antigenic. That such patients are not thus equally hypersensitive appears from recent work. This work throws doubt on the common assumption that acquired pollen hypersensitiveness is due to previous exposure to a specific pollen, and equal doubt therefore on the rationale of current methods of antiallergic therapy. (*Journal of the A. M. A.*, August 31, 1929, p. 697).

ATYCHOL NOT ACCEPTABLE FOR N.N.R.—The Council on Pharmacy and Chemistry reports that Atychol, proposed for the treatment of whooping cough, a product of Chemisch-pharmazeutisches Laboratorium Dr. H. Hoffman, Bad Salzungen, Germany, distributed by the Oralee Company, Cleveland, is stated to be composed of: "Extr. Thymi, domo par. 10. Sir. invers. 72.5, Oxytrichloroethylaether 1.25, Kal. brom. 1.75 Ol. aeth. 0.15, Aqua dest. 14.35 pCt." In reply to a request for further information regarding the asserted constituents "Sir. invers." and "oxytrichloroethylaether", the American agent submitted replies to the Council which stated that "Sir. invers." was intended to mean syrup of invert sugar and that "oxytrichloroethylaether" was chloral alcoholate produced by combination of chloral and ethyl alcohol. The Council concluded that the preparation is therefore a syrup containing extract of thyme of undeclared composition, potassium bromide, chloral alcoholate or chloral hydrate, and ethereal oil, and declared it inadmissible to New and Nonofficial Remedies because it is an irrational mixture of semi-secret composition which is marketed under an uninforming name, and without warning that it is a chloral preparation. (*Journal of the A. M. A.*, August 24, 1929, p. 611).

VIOSTEROL: IRRADIATED ERGOSTEROL.—The demonstration that many food materials can acquire unique physiologic potencies when the products are subjected to the direct influence of ultraviolet rays is a contribution of recent scientific investigation. The effects of the irradiated substances within the body are identical with, or equivalent to, those that have been ascribed to vitamin D, the

(Continued on Adv. Page xx)


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TRUTH ABOUT MEDICINES

(Continued from page 464)

antirachitic food factor. The latter is known to induce the healing or rickets or to prevent the latter when suitable foods containing vitamin D, such as cod liver oil, are employed in a prophylactic way. Tetany and probably other diseases may be favorably influenced in a comparable manner. Ergosterol, a sterol widely present in small amounts in edible products, was shown to the "provitamin" or substance that acquired antirachitic potency after suitable irradiation. It was inevitable that a product possessing the remarkable action of irradiated ergosterol and readily obtainable should attract attention in the fields of therapy and prophylaxis; also, the danger of quackery follows in the wake of discovery, particularly when, as in the case of irradiated ergosterol, the product possesses enormous potency. To avert the almost inevitable confusion and to exercise a wholesome restraint over the exploitation of the new product, the Council on Pharmacy and Chemistry of the American Medical Association has followed its usual custom of adopting a common name, viosterol, for irradiated ergosterol. It has recognized two preparations of this substance, namely, viosterol in oil 100 D (N.N.R.), having one hundred times the antirachitic potency of a standard cod liver oil; and cod liver oil with viosterol 5 D (N.N.R.), being cod liver oil with the addition of viosterol and having five times the antirachitic potency of a standard cod liver oil. In announcing this action, the Council publishes standards of identity, dosage, and suggestions for therapeutic use. The use of products accepted for New and Nonofficial Remedies, according to the advices of the Council, is likely to avert any undesirable consequences from the use of this potent agent. (*Journal of the A. M. A.*, August 31, 1929, p. 694).

PITUITARY LIQUID (SURGICAL) ARMOUR, PITUGLANDOL-ROCHE, PITUITARY EXTRACT-LEDERLE 20 UNITS, PITUITARY EXTRACT-LILLY (SURGICAL), PITUITARY EXTRACT SURGICAL-MERRELL, SOLUTION PITUITARY EXTRACT SURGICAL-MULFORD, PITUITRIN "S" (SURGICAL) AND PITUITARY SOLUTION SURGICAL-WILSON OMITTED FROM N.N.R.—The Council on Pharmacy and Chemistry reports that a reliable method of standardization for pituitary was made official in the tenth revision of the U. S. Pharmacopeia. While up to that time the Council had recognized solutions of pituitary of various strengths, when an exact standard had been made available, the Council decided that it was not in the interest of rational therapy to market strengths different from that of the pharmacopeial product. The Council therefore has omitted all pituitary solutions differing from the pharmacopeial strength from New and Nonofficial Remedies, 1929. (*Journal of the A. M. A.*, August 17, 1929, p. 524).

DENATURED VACCINES.—One of the basic hypotheses of vaccine therapy is the assumption that the artificial immunity produced by killed cultures, bacterial autolysates and other microbic products is necessarily specific for the living micro-organisms from which the vaccines were obtained. Nevertheless, commercial exploitation almost invariably overlooks or neglects the fact that such vaccines, while demonstrably antigenic, may be so altered in specificity as to be inoperative against the living micro-organisms. It has been found that bacteria treated with certain chemicals "may be changed so that new antigens are formed to which rabbits respond by the production of antibodies specific for the altered bacteria." These antibodies, which are "different from those formed for live organisms, were not demonstrated to be bactericidal for live bacteria." (*Journal of the A. M. A.*, August 31, 1929, p. 697).



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ORIGINAL ARTICLES

THE EPIDEMIOLOGY OF TUBERCULOSIS IN INDIANA

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INDIANAPOLIS

Tuberculosis was for so long a time the "captain of the men of death" that the story of its conquest is of more than usual interest. We have good reason to believe that the tuberculosis death rate has been falling since at least as long as 1750, and we have proof that it has been falling since 1850 in the only state (Massachusetts), that has reliable records for so long a time. (See Figure 10.)

Indiana has about the same amount of tuberculosis as the states immediately to the east and the west. The accompanying graph shows the Indiana rate to be slightly below that of the United States Registration Area, but in other respects the two graphs are very similar. Inasmuch as the last few years have seen the admission of many southern states to the Registration Area, and as these states have high rates because of economic conditions and a large negro population, we might have expected Indiana to have made a better relative standing.

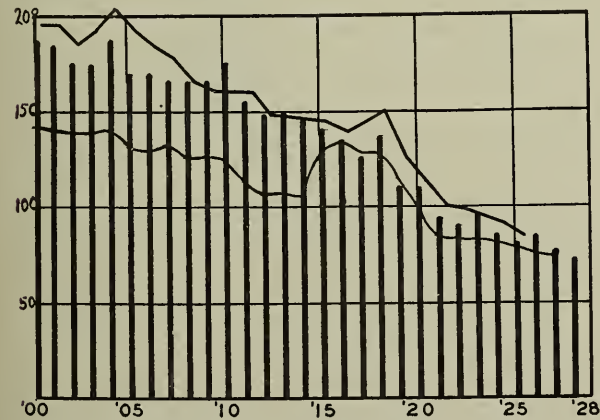


FIGURE 1—Tuberculosis death rates for Indiana, Illinois, and the United States registration area

Vertical lines..... Indiana rates
Upper graph..... U. S. Registration area
Lower graph..... Illinois rates
(Illinois Health Quarterly, January, 1929)

Figure 1. The tuberculosis death rate for Indiana, Illinois, and the United States Death Registration Area.

In order that the improvement in rates may be fully appreciated we have made two maps of Indiana on exactly the same scale showing the death rates by counties for the years 1900-1902 and the similar period 1925-1927.

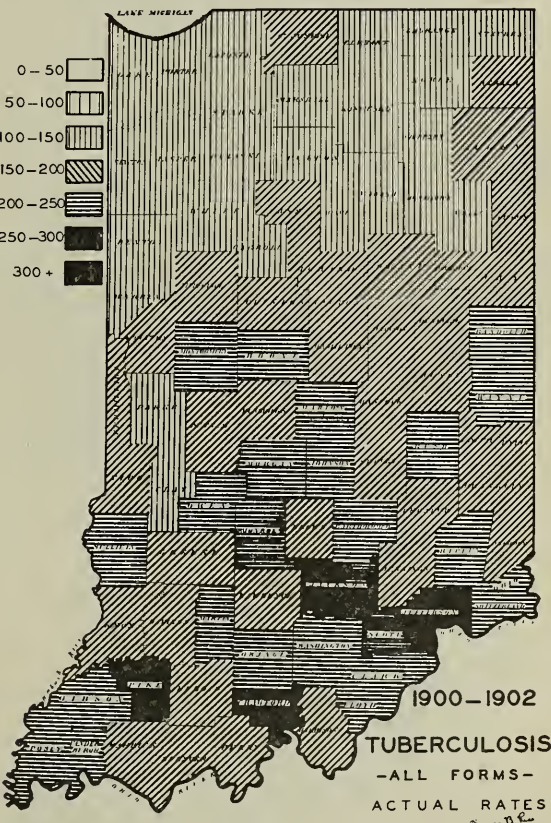


FIGURE 2—Actual tuberculosis death rates for Indiana, 1900-1902. Note that no county in the state had an average rate of less than 100 deaths per 100,000. The average for the state was 182. The northern third of the state has much less tuberculosis.

Figure 2. Actual tuberculosis (all forms) death rates for 1900-1902.

Figure 3. Actual tuberculosis (all forms) death rates for 1925-1927.

During this period of approximately a quarter of a century tuberculosis has dropped from its position as the principal cause of death to sixth

rank in this role. The following figures are interesting:

Cancer	3048	
Tuberculosis (all forms)	2498	Fifth
Bright's Disease	2481	

1928 Organic Heart Disease	5779	
Apoplexy, Cerebral	3649	
Pneumonia	3398	
Cancer	3349	
Bright's Disease	2585	
Tuberculosis (all forms)	2314	Sixth

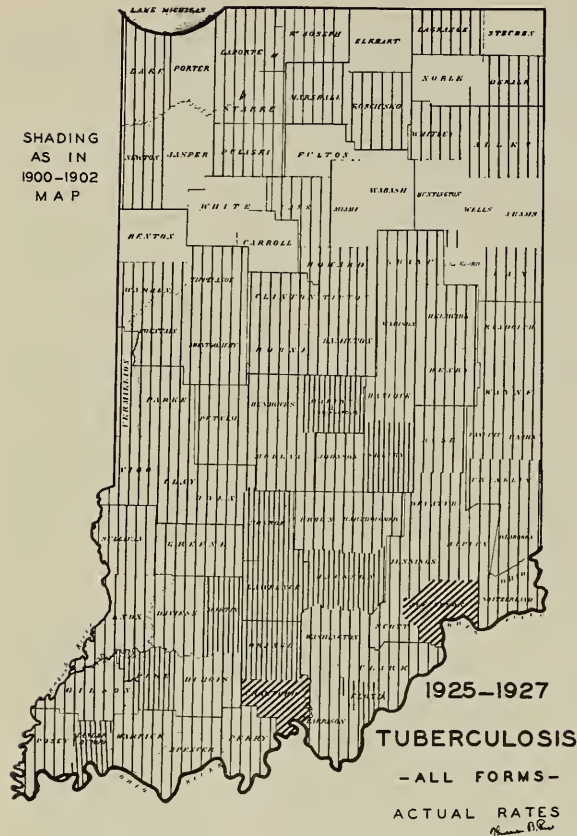


FIGURE 3—Actual tuberculosis death rates for Indiana, 1925-1927. This map is made on exactly the same scale as that shown in Figure 3. Whereas in that map no county had a rate under 100 a quarter of a century later there are only twelve counties which are not under that figure. Fifteen counties in the northern third of the state have rates under 50.

The principal causes of death in Indiana.

Year	Cause	Rank of Number	Tb.
1910	Tuberculosis (all forms)	4710	First
	Organic Heart Disease	4068	
	Pneumonia	2640	
	Infantile Diarrhea	2049	
	Apoplexy, Cerebral	1885	
	Cancer	1872	
1915	Organic Heart Disease	4332	
	Tuberculosis (all forms)	4021	Second
	Pneumonia	3098	
	Apoplexy, Cerebral	2547	
	Bright's Disease	2503	
	Cancer	2314	
1920	Pneumonia	4150	
	Organic Heart Disease	4010	
	Tuberculosis (all forms)	3151	Third
	Apoplexy, Cerebral	2688	
	Bright's Disease	2610	
	Cancer	2592	
1925	Organic Heart Disease	4949	
	Apoplexy, Cerebral	3265	
	Pneumonia	3064	

It is the purpose of this paper to determine, if possible, the causes of this consistent decline; to find the factors underlying the incidence of tuberculosis in a given community, or family, or individual. In this connection it is of interest to study the death rates from tuberculosis in the different states of the union. While some of the relations were not expected, we must confess that the ensemble, as shown in the accompanying map, is rather a surprise. There must be good reasons for these definite relations, and the understanding of them is undoubtedly of value in the prevention of this dread disease.

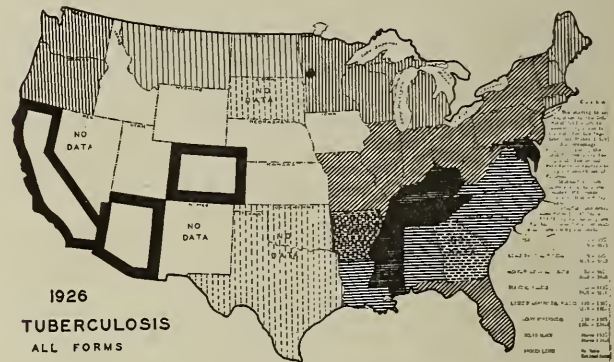


FIGURE 4—Tuberculosis death rates in the States of U. S. A. The shading of this map is in relation to the Indiana rate (83.1) for the same year (1926). This is very close to the average for the United States registration area (85.9).

Explanation of the shading:

WHITE	0-50%*
	0-41.5
Light Vertical Ruling	50-70%
	41.5-58.2
Heavier Vertical Ruling	70-90%
	58.2-74.8
Diagonal Ruling	90-110%
	74.8-91.4
Lighter Horizontal Rule	110-130%
	91.4-108.
Heavy Horizontal Ruling	130-150%
	108.-124.6
Solid Black	Above 150%
	Above 124.6
Broken Lines	No Data
	Estimations

Colorado, California and Arizona have rates which would justify the solid black shading but inasmuch as they are dumping grounds for the other states they are only outlined. It is quite possible that the rates for Washington and Oregon are higher than they would be if it were not for the same process.

Figure 4. Tuberculosis (all forms) death rates in the United States.

Likewise a study of the distribution of deaths from tuberculosis by counties in the state of Indiana reveals some rather interesting and even

*The percent of Indiana rate. Figure following the percent is the actual death rate.

surprising relations that are quite consistent, and therefore not a matter of chance. Figures 5 to 9 are made on a relative scale for purposes of comparison. The rates for the years indicated were averaged, and then the counties shaded in relation to their percentage of the average for the entire state for the same period. Counties which had less than fifty percent of the state average are shown

the state contains all of the white counties, and nearly all of those shaded lightly. Crawford and Jefferson counties are black in every map, and those counties in the central section of the southern part of the state are mostly shaded quite dark. In the 1910-1919 map Parke county is black but this is doubtless due largely to the fact that the state tuberculosis sanatorium is located there. This county is to a considerable extent a dumping ground for the remainder of the state. It will be noted that the northern portion of the state is relatively improving, while the southern is relatively worse in recent years than at the beginning of the century. By comparison of the actual death rates we are reassured however that all parts are showing absolute improvement of rather marked grade.

The analysis of the reasons for this constant and peculiar distribution of the disease is no small task, and the writer is anxious to have it understood that the following attempt is meant to be nothing more than a tentative approach. It is certain that many corrections, and explanations, can be made by physicians practicing locally. Correspondence on such points will be appreciated.

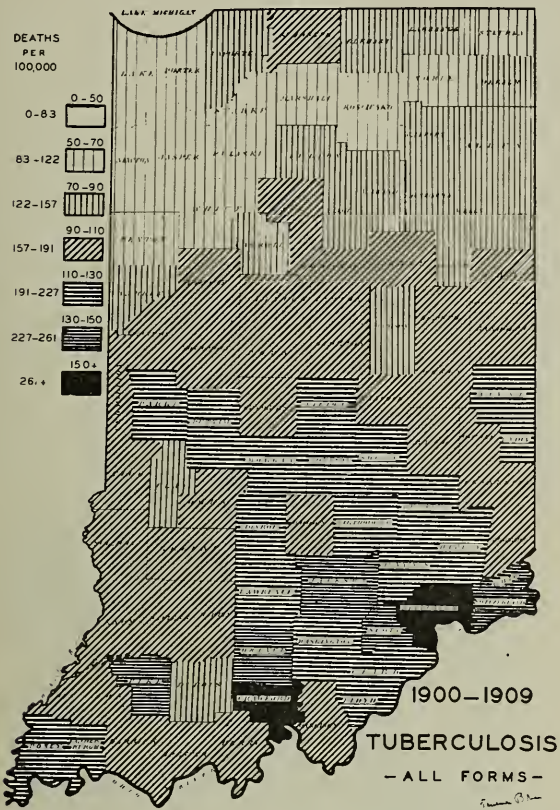


FIGURE 5—Tuberculosis in Indiana, 1900-1909. The death rates for the ten year period are averaged, and then represented on the map in terms of percentage of the state average. The percentage rate is indicated by the figures above the various shaded areas to the left of the map proper. The actual rates are given at the sides of these areas. The map needs no explanation.

white; those with more than one hundred fifty percent of the state average are solid black; those with about the average amount are diagonally ruled, etc. The depth of the shading roughly indicates the relative death rate. The actual and the relative rates are indicated by the figures accompanying the legends of the maps.

Figure 5. Tuberculosis death rates for Indiana, 1900-1909.

- Figure 6. Ditto for 1910-1919.
- Figure 7. Ditto for 1920-1924.
- Figure 8. Ditto for 1925-1927.
- Figure 9. Ditto for 1928.

It will be noted that Benton county, quite consistently, has the best record of any county in the entire state. Indeed, this county had not a single death from tuberculosis during the year 1926, and its rate has always been low. Other counties near Benton also have low rates indicating that the result is not an error due to a small population. Note that in all of the maps the northern third of

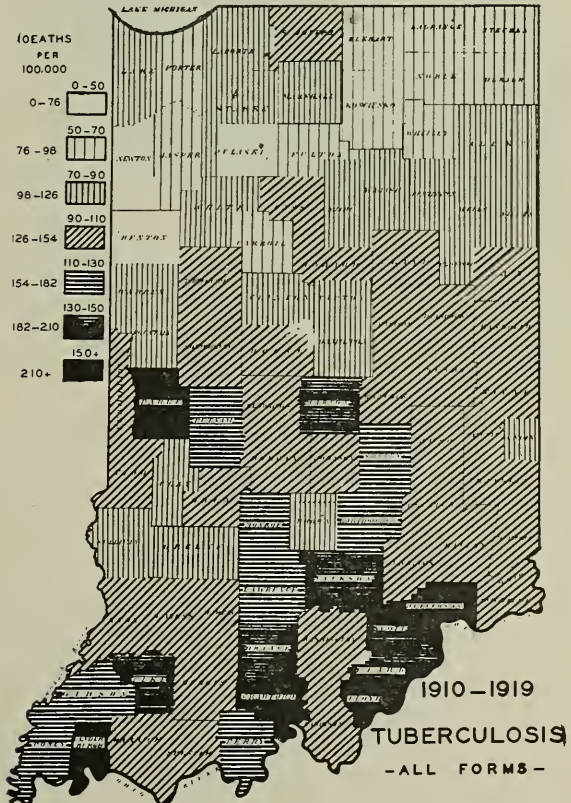


FIGURE 6—Tuberculosis death rates for Indiana, 1910-1919. Parke county is shown in black due to the fact that the state tuberculosis sanatorium is located in that county. Marion County is quite dark due to the very large colored population with its excessive rates.

In the first place we can definitely rule out the idea that the cause of the decline is due entirely to knowledge of the disease *per se*, or of the tubercle bacillus as the etiological agent. We are sure of this because the decline began at least a

hundred years before the germ was discovered. It can be noticed however that the downward trend has been more rapid since the epoch-making discovery of Robert Koch in 1882. Furthermore the activities of the anti-tuberculosis societies cannot be credited with all of the improvement because

but this is due to a marked increase in the colored population (Roby and Falk, *J. Prev. Med.* 2:79) and also to an influx of Mexican laborers with extremely high rates—971 deaths per 100,000—according to Goldberg (*J. A. P. H. A.*: 19; 277.)

It is likely that the sharp decline since 1918 is largely due to the greatly increased interest in this and related diseases; to the relative prosperity of the past decade; and to the fact that a large number of sanatoria have been built during this period, or enlarged if they had already been built. There have been great improvements in living and working conditions during the past decade. People have learned to consult their physician earlier than was formerly the case. We cannot claim that any one cause is solely responsible, but these along with the improved methods in diagnosis, treatment, isolation, nutrition and general well bearing which have been fostered by the medical profession and the organized layman doubtless adequately explain the marked decrease.

Figure 10. Trend Graph for Indiana, Massachusetts and Illinois.

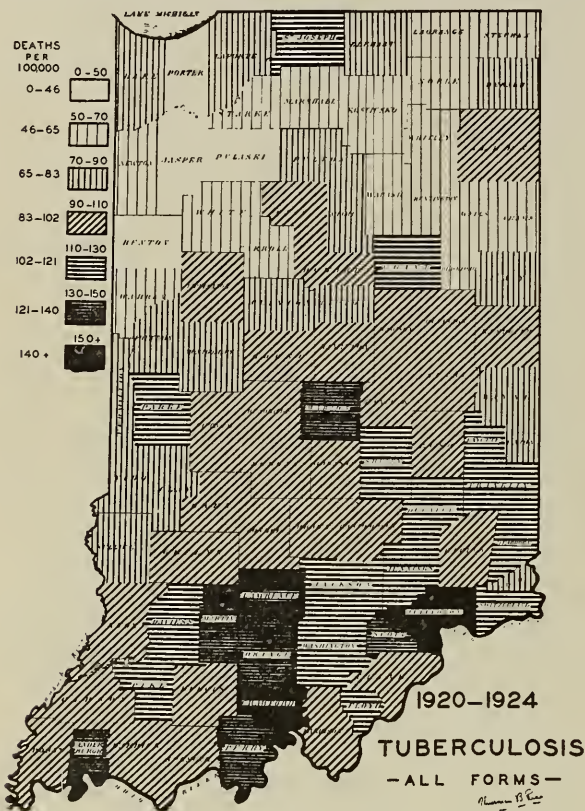


FIGURE 7—Tuberculosis death rates for Indiana, 1920-1924. St. Joseph County shows an increase, probably due to the establishment of the Healthwin Sanatorium, which takes cases from outside the county. Grant County is darker, probably due to the fact that the Soldiers Home for old men was changed to a sanatorium for mental and nervous cases among the younger soldiers of the World War. Many of these men also had tuberculosis.

there were few such societies before 1905-1910. There has been a very rapid fall in the trend rate since 1918. This is remarkable since it was in that year that the influenza epidemic came, and we might reasonably have expected the trend to turn upward after that date. It is not unlikely that the fall in rate after 1918 was due in large part to the fact that many who would have been dying a few years later of tuberculosis, died during the epidemic of influenza or more probably of pneumonia. In this way the population was weeded of its late tuberculosis cases. At least this explanation has often been given though it has never been entirely convincing inasmuch as it is well known that influenza often plowed the soil for a subsequent tuberculosis infection. If the weeding out theory is the correct explanation it seems as if the trend should have turned back upward before this time, and it has not done this. In certain cities and states the trend is, to be sure, showing a marked tendency to flatten out or even turn upward. Chicago has, for example, shown an increase in total deaths from tuberculosis since 1922,

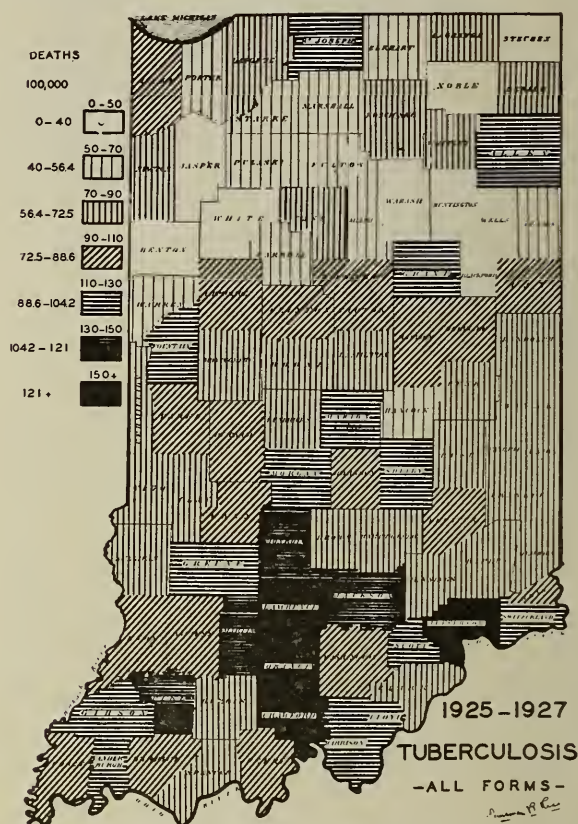


FIGURE 8—Tuberculosis death rate for Indiana, 1925-1927. Note that the northern part of the state is relatively better and the southern part relatively worse though of course every county has shown great actual improvement during the quarter of a century. Benton County has been white in the last three periods studied. Crawford and Jefferson have been black in all. The tier of counties directly north from Crawford have grown progressively blacker. The fact that the Irene Byron Sanatorium of Allen County takes patients from out of that county accounts for the darker shading than that of surrounding counties.

A triangle bounded by lines connecting Marion, Vanderburg, and Jefferson Counties contains practically all of the dark counties in every one of the maps, and a line across the state at the level of the northern boundary of Delaware and Madison Counties will show all of the lightest counties north of it.

We are in this study, however, more interested in the geographical than in the chronological distribution of this disease. Undoubtedly the fact that a given region has had in the past an unusual amount of tuberculosis will insure that there will be abundant opportunity for contamination of susceptible individuals living in the community at present. This reasoning does not, however, lead to the real solution, because we must ask why there was more tuberculosis in these counties in the first place. It would be interesting in this connection to trace the origin of the immigrants to these counties, but that seems at present to be an impossible task except in the most general way. It is quite likely that a survey of this sort would reveal that the counties in southern Indiana that are now highly tuberculous were settled mostly by families coming from some other excessively tuberculous area. Southern Indiana was largely settled by immigrants from Kentucky and other states to the southeast, and it is a fact that these states have, at present at least, very high rates. This explanation is not, however, adequate inasmuch as other counties not excessively involved were settled by the same stock. It is likely that the

stock of the people is relatively susceptible to the disease and that this susceptibility rather than the actual contagion is responsible for the continuation of the disease. There are, however, so many undeterminable factors in this assumption that we can do no more than mention it in the explanation

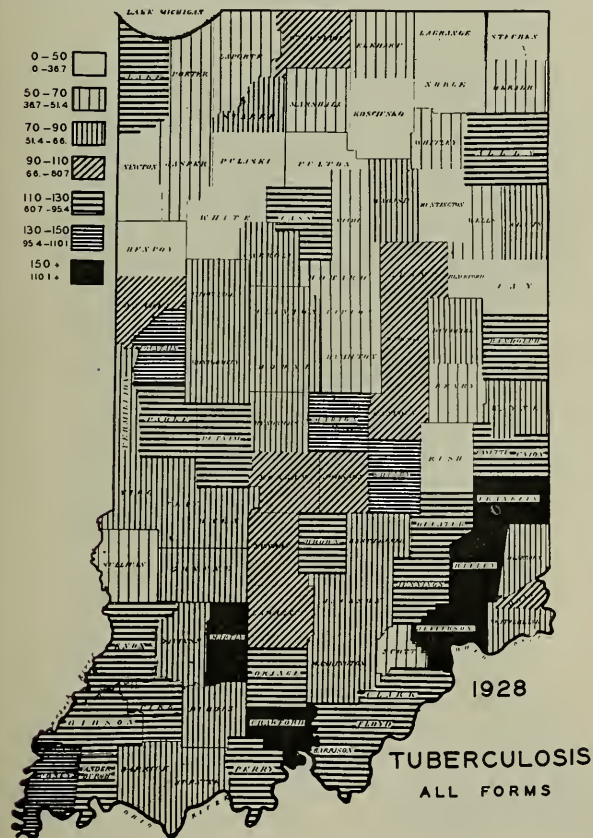


FIGURE 9—Tuberculosis death rates for Indiana, 1928. This map is based upon the data for a single year and as a result shows a very considerable limit of error. Several of the northern counties that are shown white have very low rates because they have been sending their cases to sanatoria in Allen, St. Joseph, and Lake Counties which in spite of their being pretty well supplied with beds show a high rate for the reason that they are the dumping grounds for adjoining counties. We are hoping that Ripley and Franklin Counties are not getting the tuberculosis habit as would seem to be indicated by the data for this one year. For the first time a white county (Rush) is found south of the northern third. It is doubtful if Rush County can continue white.

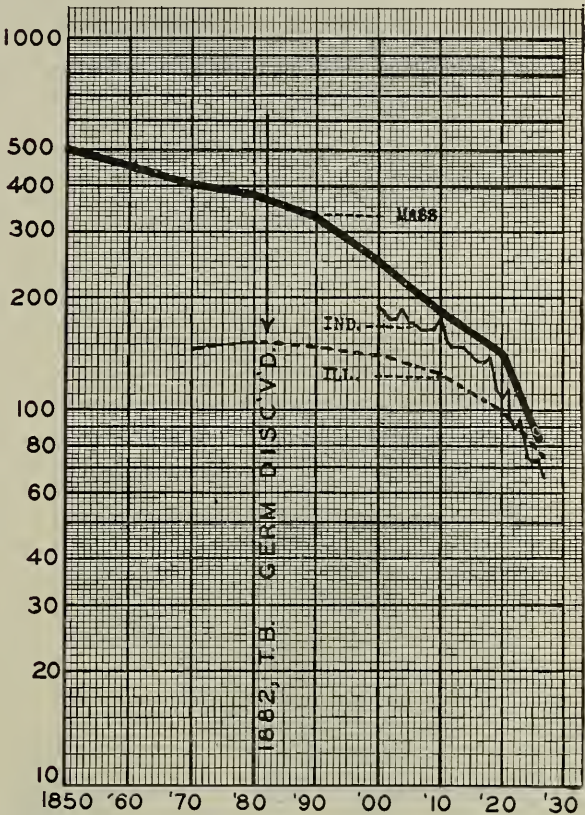


FIGURE 10—Trend graph for Indiana, Illinois and Massachusetts. Note that this graph is on logarithmical paper in order to show trend rather than absolute values. In other words the graph represents rate of decline rather than actual decline. It is just as hard to reduce death from 20 to 10 as from 200 to 100. The space between 20 and 10 is the same on this paper as between 200 and 100.

of the relatively large amount of diseases in these counties. There may be something of this sort but it seems a wholly inadequate explanation.

The modern tendency is to regard tuberculosis as not being transmitted by heredity, but there seems to be little doubt that certain families inherit a lack of ability to resist the disease. The so-called "phthisical constitution"—narrow chest, sloping shoulders, long neck, slight physique—may be a family characteristic. Obviously a community of such folk would probably continue to show a high rate for a long period of time. The natives of the hilly portions of the state are often of this type, but we cannot always be sure that it is not the result rather than the cause of the disease, or that it is not the result of poor nutrition rather than a constitutional characteristic. Jews and Italians have low tuberculosis rates, while Irish, Mexicans, Indians and negroes have excessively high rates it has been claimed by various authorities. Differences in living conditions cannot explain entirely this variation.

Quite aside from true biological inheritance we must consider the continuing effects of social inheritance. A child inherits in this latter sense the home of his parents whether it is clean or reeking with germs; he inherits in the social sense the habits, the standards of living, and the social and

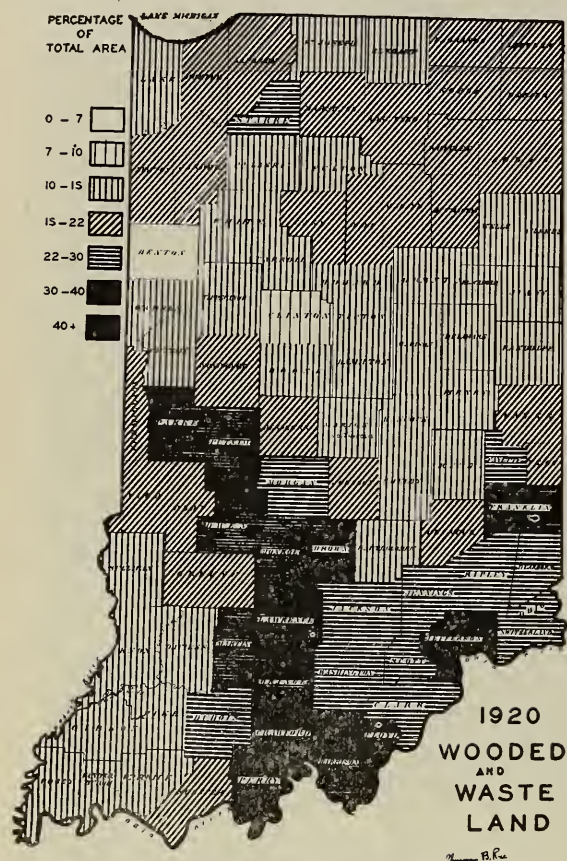


FIGURE 11—Wooded and waste land in terms of the percentage of the total area of the county. It is highly significant that Benton County has the least while Crawford has the most.

economic status of the family. These are of enormous importance in the determination of this disease. If a mother is a poor cook and a worse manager her immediate family will suffer to be sure, but also very likely her daughters will be poorly trained, and their families suffer in turn.

It is the modern tendency to stress the environmental phases relative to tuberculous infection as being the more important. It is now an accepted fact that a very large portion of the population has become infected with the germ of tuberculosis by the time young adult life has been reached. Whether a given individual succumbs or not depends, not so much upon when, how, or where he got the germ—except that it is particularly dangerous when contracted at a very early age—as upon the manner in which the body reacts to it. This reaction is conditioned upon a great many things some of which are general health, intelligent care of self, ability to obtain adequate rest, a high state of nutrition, wholesome occupation, good living conditions and proper medical attention. All of these depend in large measure upon his cultural and economic status.

As we consider the problem of determining the factors causing certain counties consistently to have a high rate the matter of geography immediately suggests itself. Since the metabolism of lime seems to bear some as yet undetermined relation to this disease we think at once of the limestone area of southern Indiana. A map showing the limestone area, however, bears apparently no relation to the map showing the incidence of the disease. Besides, other things being equal, we might expect abundance of lime in the soil and water to be an aid rather than a liability. The highly tuberculous counties are near the distribution of the unglaciated portions of the state, but do not coincide with them to any significant degree. It would be hard to see how the fact of non-glaciation could have effect except as it is apparently responsible in considerable degree for the high typhoid rate of many of these same counties (Rice, J., Ind. St. Med. Association; Sept. 1928.) Typhoid rather often plows the soil for tuberculosis by lowering the patient's resistance and state of nutrition.

Topography seems considerably more significant. It will be noted that all of the habitually

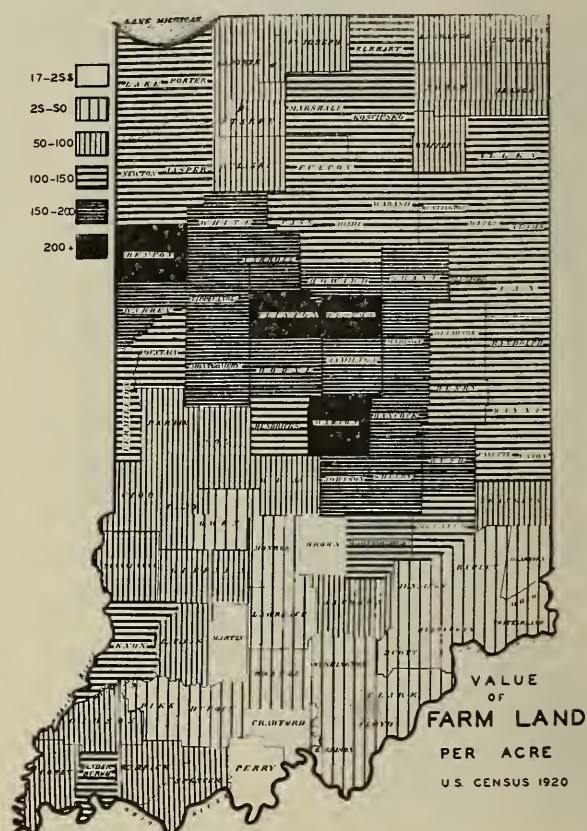


FIGURE 12—The value of farm land per acre (U. S. Census, 1920). Benton County land has the highest value, Crawford County land the lowest. The numerals with the shaded areas at the left represent the value in dollars per acre.

dark counties are hilly thereby making transportation and economic development difficult. The soil is mostly clay, and for the most part poor. The land was farmed hard in the early days of the state, and is now pretty badly worn and

washed, or even allowed to grow up in brush. Nearly all of the waste land of the state is in this general region, and a great many farms and fields are now completely abandoned. It is highly significant that one of the two counties (Crawford) that was black in every map has the lowest land valuation per acre, and the largest percentage of waste land in the state, while the county (Benton) that was always white, has the highest land valuation per acre and the lowest percentage of waste land.

Figure 11. Map showing waste and wooded land.

Figure 12. Map showing land valuation.

A map showing the average value of crops per acre is essentially the same. The counties of the mid-section of the state show the best crops, however, while those of the northern third have the lowest tuberculosis death rates. This warns us that we may not carry this factor too far as an explanation. Benton county leads—according to the 1920 census—in value of crops per acre.

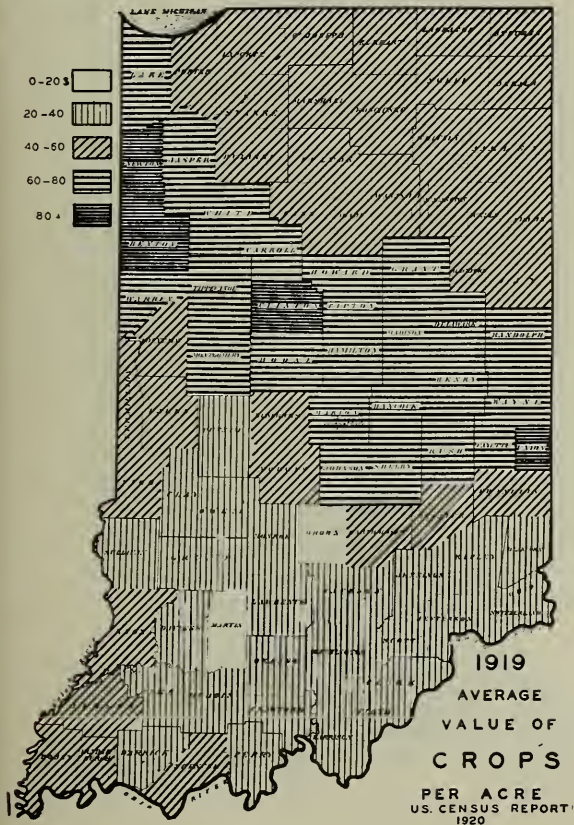


FIGURE 13—Average value of crops per acre (U. S. Census report, 1920). Inasmuch as these figures are for but one year local variations may show too plainly. The map is however quite uniform. Benton County is again at the head of the list.

Figure 13. Map showing average value of crops per acre.

Northern Indiana is fortunately situated with regard to facilities for transportation and other resources, and as a result is to a large extent independent of the soil. Southern Indiana must, however, get its wealth from cultivation of the soil,

with some considerable help from the coal and stone industries. If then the soil is relatively non-productive as the map (Fig. 13) shows it to be we face a very difficult economic problem. Apparently there is but one remedy and that is to find some more productive method of using the soil.

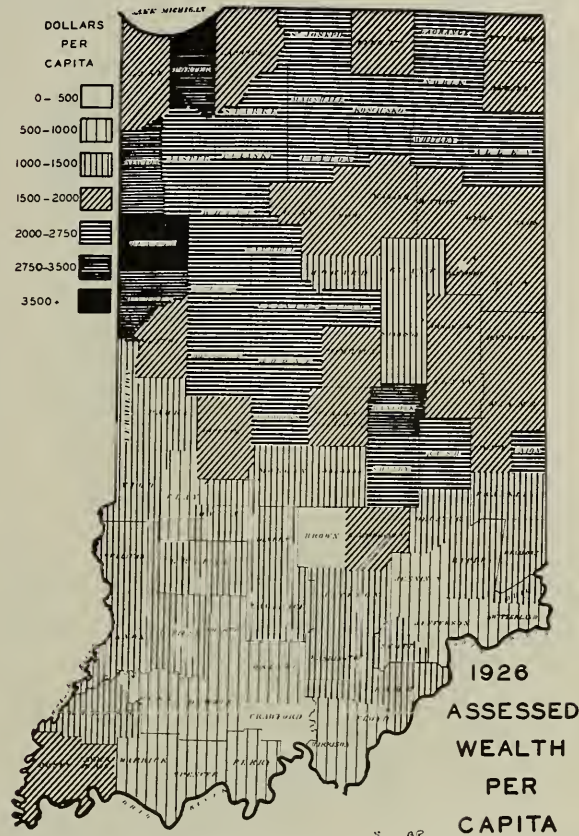


FIGURE 14—Assessed wealth per capita (1926). Benton leads, Crawford and Brown have least. The counties with large cities have much wealth, but the large population cuts down the average.

The planting of large orchards gives promise, but orchards require capital for the reason that the development is slow, and the harvesting expensive. Furthermore special training is needed in such industries, and there must be good transportation facilities to large markets. Indeed, any new form of agriculture or horticulture requires considerable effort, training, initiative and capital.

The well-known epigram giving the factors determining the incidence of tuberculosis as "Poverty, POVERTY, POVERTY, and the germ of tuberculosis", contains a large kernel of truth, though it is of course overstated. The poverty stricken family must of necessity live in a poor, or at least inadequate house, as a rule; food is quite likely to be scanty, poorly prepared, and badly chosen for the reason that foods which are of special value against tuberculosis are rather expensive; medical, nursing and dental care are rarely adequate except when there are free clinics and charity hospital wards to provide such service; vacations cannot be taken as needed; when the patient is ill he or she cannot afford to stop work and take a rest, nor can he or she hire someone else

to take up the health breaking responsibilities which may have been largely responsible for the physical breakdown; lack of educational facilities, and inability to secure the other advantages of modern standards of living complete the ensemble. We marvel not that there is so much tuberculosis in these very poor families but rather that there is so little.

DEATHS PER 100,000 FROM TUBERCULOSIS

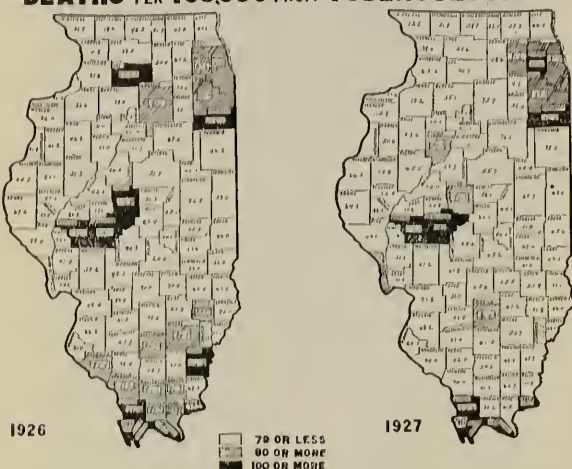


FIGURE 15—The distribution of tuberculosis deaths in Illinois. From Illinois Health Quarterly, January, 1929. These maps are shown because they bear approximately the same relation to wealth as do the Indiana maps. The extreme southern portion of the state—"Egypt"—has had for a long time more tuberculosis than the remainder of the state.

The inadequacy of a large proportion of the houses in which families live in various parts of the state is very obvious even to the passer-by, but far more impressive as one actually goes into the house. Complete lack of every sanitary facility, lack of proper ventilation, lack of heating arrangements which would make proper ventilation possible; beds and bed rooms so crowded that it would be impossible to prevent the spread of colds or other infections through the entire family; primitive methods of cooking, laundrying, and cleaning makes house work hard and unsatisfactory; lack of the conveniences of electricity, running water and sanitary plumbing encourage the formation of bad hygienic habits; lack of things beautiful and interesting makes for mental depression. Besides there is the certainty that many of these houses are reeking with germs thereby insuring that the baby in such a home will be inoculated at an early age. A large part of the shacks such as are found in the slum district of every city, and many of the poorer districts of the country are infested with vermin. It may seem far-fetched to claim that bed-bugs can be a causative factor in the determination of tuberculosis, but they greatly disturb rest, they cause bites which may become infected, they suck considerable amounts of blood, they make extra housework, and they take the joy out of life generally. Life is hard, monotonous, ugly, and depressing.

Figure 14. Map showing assessed valuation per capita.

The importance of a diet high in vitamins and calories in the prevention of tuberculosis needs no emphasis here. Milk is of vital importance. But less milk is produced in the southern parts, and the herds are less likely to be tuberculin tested. Milch goats are being introduced into some of the southern counties and should be an important factor in the battle against tuberculosis inasmuch as they thrive well on poor hilly pastures, or even in back yards. They are far less susceptible to tuberculous infection themselves than are cattle. Their milk is at least equal to if not superior to cow's milk for children, and, indeed, for the many other purposes to which milk is put. Fresh meat, a wide variety of vegetables and fruits are essential to proper nutrition, and nutrition is, of course, the cornerstone of all treatment and prevention of tuberculosis. Fresh foods in all seasons are available only to those who have the money to buy them, and have access to modern transportation and refrigeration facilities. The typical diet of the resident of the hills is far from being ideal in these respects.

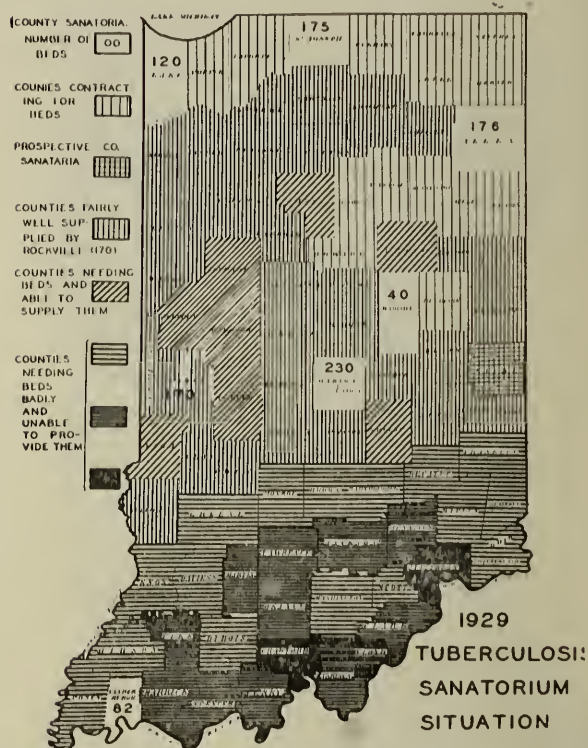


FIGURE 16—Map showing the sanatorium needs of Indiana.

The effect of bad teeth, infected tonsils and adenoid tissue, of malnutrition, and various other easily corrected defects upon the incidence of tuberculosis is well understood. Medical advice and direction in the matter of the feeding of a baby or a small child, in the treatment of colds, measles, whooping cough, influenza, pneumonia, typhoid fever, and other infections, in the making of early diagnoses of incipient tuberculosis, and in securing early treatment in sanatoria or fresh air

camp and schools can save a great deal of morbidity and mortality. Such medical service cannot be had by a large portion of the population.

Figure 15. Tuberculosis in Illinois. A means for making available such help needs take neither the form of personal charity on the part of the physician, or of social medicine on the part of the state, both of which are obviously unfair to the medical profession, and ultimately for that and other reasons not the best for the community and the patient. Sanatorium facilities are woefully wanting in those parts of the state that need them most. This state of affairs should be corrected by the state as a whole, since the southern counties are already taxed to the limit. The Rockville Sanatorium has performed a splendid service for the state, but is much too small. Another such institution should be built in the region indicated by the maps here shown. The removal of patients with the open disease to hospitals and sanatoria is not only the humane thing to do for the sake of the patient, but is even more the sen-

lieve that it is probably the most important service that the government provides for its citizens. Particularly is this true in the instance of the fight against tuberculosis. As education, general culture, and enlightenment advance living conditions improve, medical service is more utilized, hygienic habits are fostered, cleanliness and thrift become more nearly universal, and everything looks up.

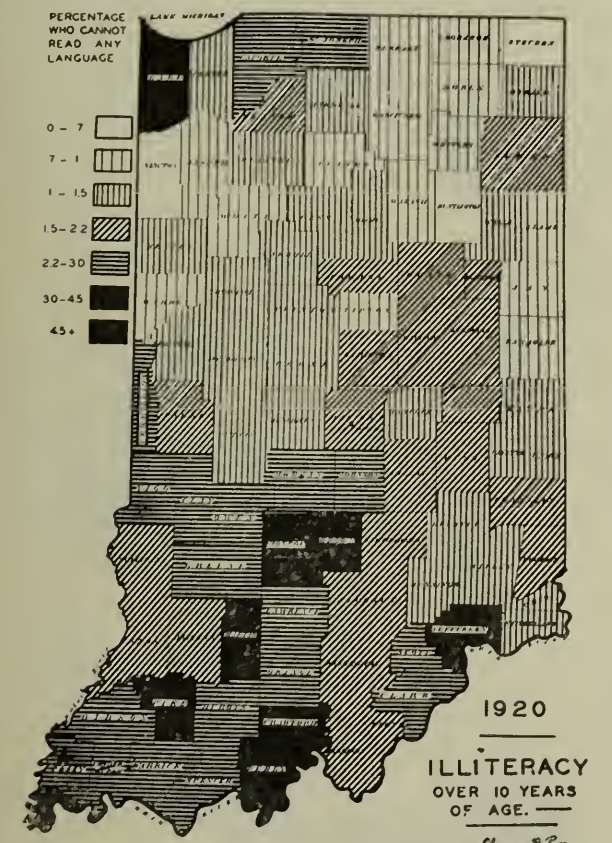


FIGURE 17—Incidence of illiteracy in persons over ten years of age. (U. S. Census, 1920). Newton and Huntington have least; Crawford, Brown and Lake have most. Lake County is high because of the large foreign population, many of whom have had no opportunity for schooling.

sible thing for the sake of the rest of us, particularly the children.

Educational facilities must of course suffer as the economic situation becomes more and more difficult. The furnishing of schools for our children and young people is by far the most expensive item in local government. At the same time we be-

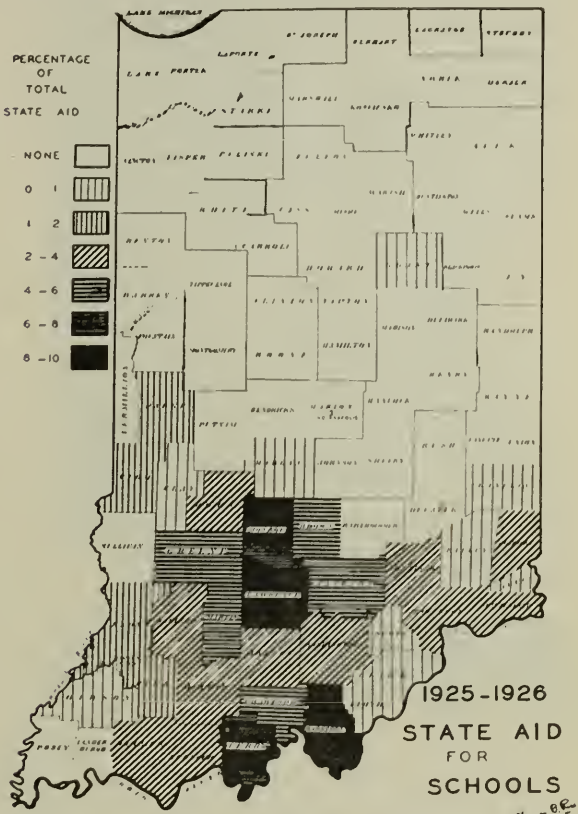


FIGURE 18—Counties receiving state aid for schools (1925-1926). The numbers opposite the shaded areas in the legend represent percentages of the total amount of state aid funds spent in a given county.

The deadliest foe of tuberculosis is knowledge. So long as superstition and ignorance prevail we may expect tuberculosis to thrive. Patients will take the position that there is nothing to do but prepare to meet their God, and in such cases they are rarely disappointed. We well remember a man living in a shack who told us, "Wal, my folks has all died uv it, an' I hain't no better'n they wuz. I'm ready ter die." To be sure he died,—and yet lived long enough to infect his entire family, who were so ignorant as not to attempt to protect themselves. Maps showing the incidence of illiteracy, and the distribution of state funds for education tell a story in this connection that needs not be elaborated. It will be seen at a glance that they closely agree with the incidence of death from tuberculosis.

Figure 17. Map showing incidence of illiteracy. Figure 18. Map showing distribution of state funds for education.

Transportation is vitally important to the welfare of the modern community. The regions with

poor roads will of necessity have difficulty in finding a market for their products, in getting fresh foods from the outside, in making social contacts which would stimulate them to community pride, and in keeping up with the rapidly moving world. The topography of many of the southern coun-

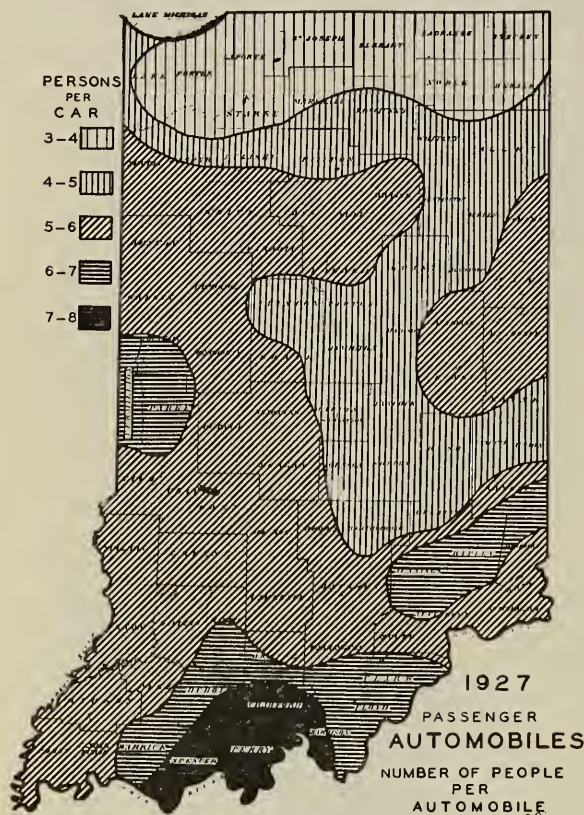


FIGURE 19—Passenger automobiles. Number of people per automobile. Inasmuch as the licenses do not need to be obtained in the county in which the owner lives a map observing county boundaries would give a false impression. The lines between zones are of course only estimated, and so the map is to be taken not too exactly. Evidently this map expresses economic and road conditions. Both are important in the consideration of the cause of tuberculosis. It is interesting and possibly significant that the relatively dark area including Jennings, Ripley and Franklin Counties is the same as area which shows marked increase in tuberculosis death in 1928 (Fig. 9). Exactly the same is true of the region about Fountain County. The lightest area in this map nearly coincides with the light area in the same map.

ties makes road building a difficult matter. It must be said to their credit that these counties are taxing themselves more heavily than more fortunate counties for this purpose, but the amount of taxable property is relatively small, and as a result the revenue obtained is relatively small as compared with the great expense of building roads through a hilly terrain. The attention of the Highway Commission is directed to the peculiar needs of this portion of the state.

Figure 19. Map showing the number of automobiles in relation to population.

It is well known that certain races are more susceptible to tuberculosis than others. Whether this is due to an inherent difference, or to variation in habits of living, or to the fact that certain races have been drastically selected by the action of high tuberculosis death rates which have for

centuries killed off the more susceptible individuals, or that some of these races have not been in sufficient contact to develop a high personal immunity we shall not attempt to discuss in this place. The Irish, the Mexican, the Indian, and the Negro races are known to have high rates, but the distribution of none of these is such that it will in any significant degree explain the peculiar distribution of the disease in this state. The part of the state that has the highest rate has almost no members of these races.

Figure 20. Map showing percentage of negro population.

It is a fact, however, that the negro in Indiana has a much higher tuberculosis mortality than does the white race. The high rate for the city of Indianapolis as compared with other northern cities is undoubtedly due to the high incidence among the unusually large colored population. (See Fig. 26.) In Chicago the rate is 2.5 times as high among the colored as among the white, and the rate for colored children under eleven years is 10-20 times as high as the corresponding rates for white children of the same age (Roby and Falk; J. Prev. Med. 2:79). Sanitary conditions in the

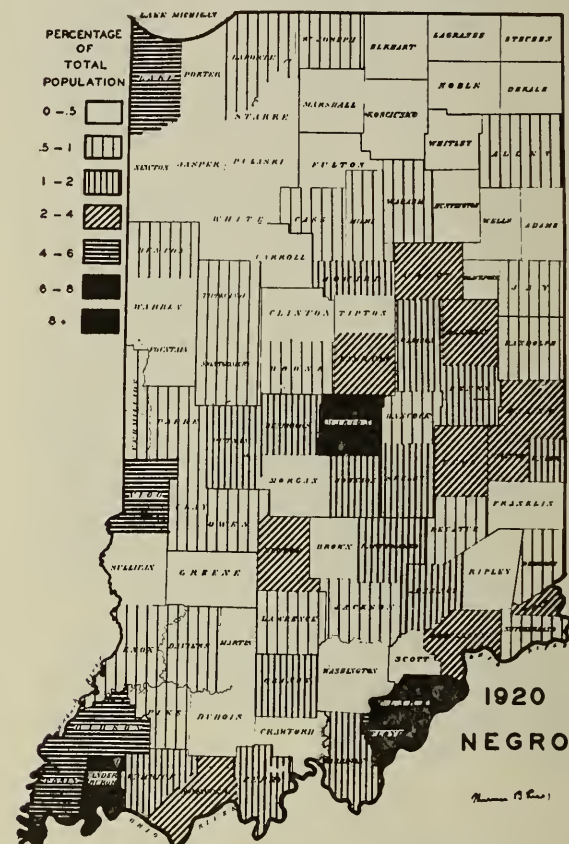


FIGURE 20—Negro population. (U. S. Census, 1920). The negro race is very subject to tuberculosis, but this fact does not greatly affect the distribution of the disease in Indiana except in certain counties which have large cities. Crawford County has practically no negro population.

colored portion of the city, general culture, and economic status, of course, play a very large part in this differential rate. The negro was evolved in a tropical climate with a blazing sun. His race

developed pigment which serves the purpose of protecting him from the excessive rays. Not unlikely he is now too well protected when in a northern climate, and especially when in smoky cities.

Figure 21. Graph showing rates in white and colored races for Illinois.

It is also evident that the foreign population is not responsible for the high rates. This is a problem for the white stock to solve. Inasmuch as a large proportion of the inhabitants of the southern counties, and many of our cities in the middle and northern sections—except in the Calumet area—have come from Kentucky and other southern and southeastern states which have higher rates than Indiana we may suppose that a large amount of the disease can be traced to these states and to the stock coming from them—rather pure Anglo-Saxon.

Figure 22. Map Showing Percentage of Foreign Born.

The inhabitants of the rural sections have commonly looked with pity upon those compelled to live in the cities. The crowded and the unsanitary conditions were thought to be very bad for the health, as they doubtless are. But there are many other factors and many of these operate in favor of the city. As we study the maps we see

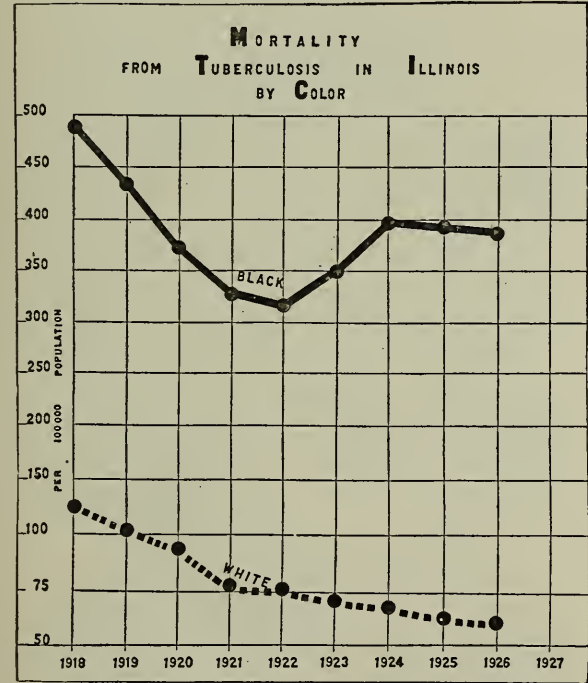


FIGURE 21—Tuberculosis death rates for whites and negroes in Illinois. Data from Illinois Health Quarterly, January, 1929.

that both the best and the worst rates prevail in strictly rural districts. With the difference, however, that the lowest rates are in the *rich* rural prairie counties of the northwestern portion, and the highest are in the *poor* rural hilly counties of the central southern section. In the main, however, the rural counties have the higher rates. This is undoubtedly due to the economic situation, and

to the lack of taxables as has been discussed elsewhere. City populations have better sanitary and educational facilities, they use their doctors, dentists, and nurses more, and are a more highly selected group as a whole. They are much more likely to have access to hospitals, clinics, and

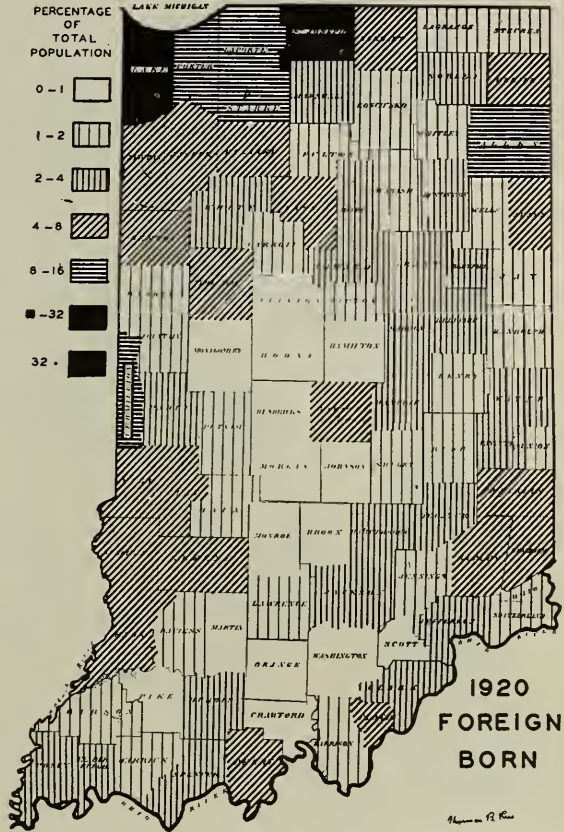


FIGURE 22—Foreign born. (U. S. Census, 1920). Evidently the distribution of the foreign born has nothing to do with the peculiar distribution of tuberculosis. It is our own problem.

sanatoria, and are far less likely to take the traditional attitude of passive submission to inevitable disaster in the case of tuberculous infection.

Figure 23. Map showing percentage of urban population.

At first thought it might be supposed that the incidence of tuberculosis or of any other disease of a transmissible nature would be directly proportional to the density of the population inasmuch as closely settled communities give more opportunity for contacts. This is not the case as a comparison of the maps will show. The denser population has more money—collectively at least—better transportation, better school and sanitary advantages, and these more than compensate for the disadvantages of city life. Besides, contacts help develop immunity as well as transmit the disease.

Figure 24. Map Showing Density of Population.

The rate of change of a population seems to be of more importance than the mere numbers. Communities that are gaining rapidly have more wealth—indeed this is the reason why people are moving to them—while the regions which are

losing population are usually in the grip of rigorous economic difficulties. Then, too, it is the more virile stock that commonly migrates to a new place where there seems to be opportunity for getting ahead. The sick, the invalid, and the less virile are of necessity compelled to stay at the

average age of the groups compared — night watchmen are older than news venders for example. Different groups of workers may have entirely different social and economic standards. Certain races are likely to take up certain occupations almost exclusively. It is said that vault cleaners have high tuberculosis rates. This is, however, much more because of their low social and cultural level, than because of the unhealthfulness of their work. Street sweepers have high rates, but this does not prove that it is because they breathe so many germs in the dust. It may be rather the dustiness of their work, or their low living conditions, or it is not at all impossible that a great many of them have previously had the disease and take up the work in order to get out of doors and into the sunlight and fresh air. For these and other reasons it is very hard to be sure about the effect of occupation except in particular cases. Farming is usually given as the best occupation relative to tuberculosis infection, and yet the black portion of the state is in the farming region. Other factors seem more vital. The following hygienic principles probably underly the

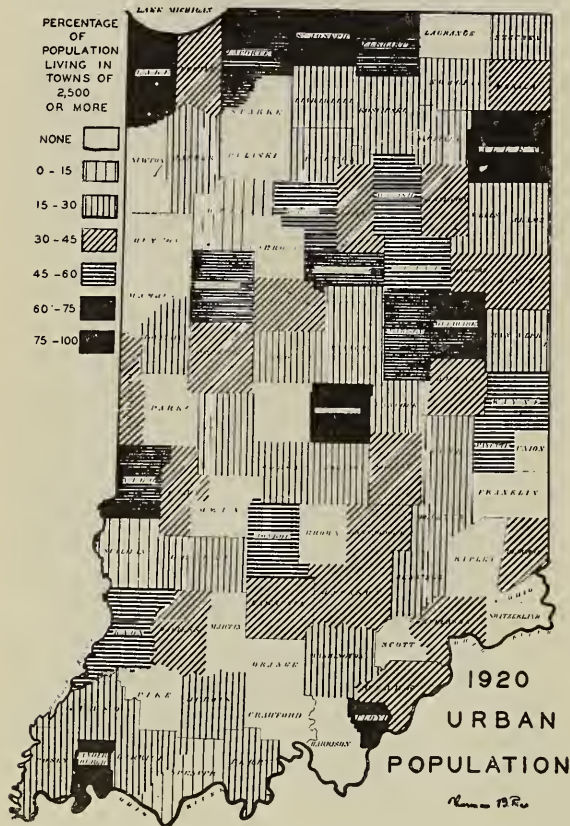


FIGURE 23—Distribution of population. Percentage of the population living in town of more than 2,500. (U. S. Census, 1920). Note that the part of the state with least tuberculosis is the rich rural part, while the portion with most tuberculosis is the poor rural. The most urban counties are intermediate in their incidence of this disease.

old home where conditions are at least familiar. Growing communities have new and modern houses in which to live, while the losing community must content itself with the houses that they already have, and which are more likely than not old and inadequate from a sanitary standpoint. Such houses are often reeking with germs. The conditions which tend to cause infection are left behind, while they are rather successfully avoided by the developing community. It is noteworthy that the germ of tuberculosis has not been able to withstand modern civilization and its methods. The more "civilized" a community—the less tuberculosis.

Figure 25. Map Showing Change in Population in Recent Decades.

Occupation undoubtedly plays a large part in the determination of tuberculosis in a given individual, and also in a community that has a characteristic occupation for the most part. Data on the incidence of tuberculosis in various occupations are hard to get in reliable form. Very frequently there is a marked difference in the

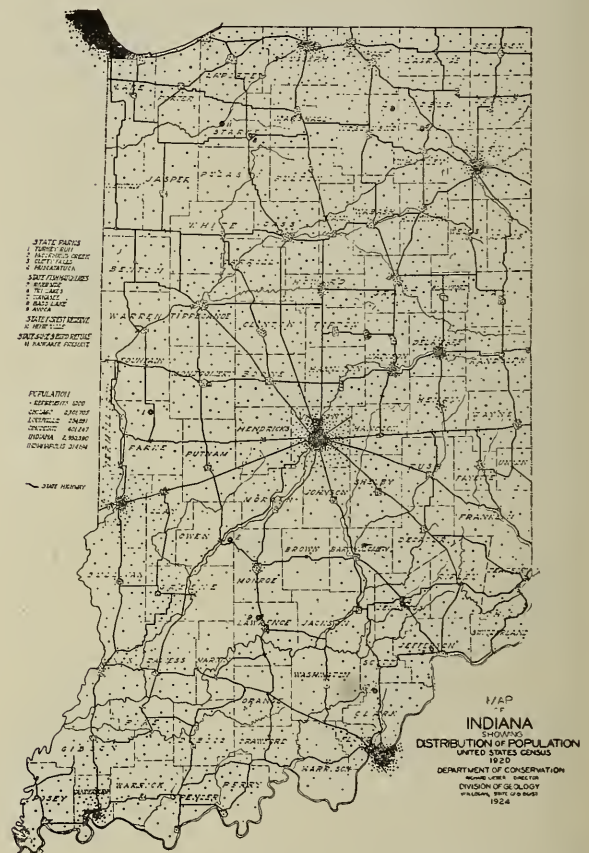


FIGURE 24—Map showing density of population. (Map furnished by Indiana Department of Conservation.)

reasons why one occupation is better than another: good wages, reasonable working hours, presence of fresh air and sunlight, requirement of a considerable degree of intelligence or education, freedom from irritating fumes, dusts, or industrial poisons.

Indiana is fortunate in that the stone quarries for which the state is noted are limestone quarries rather than granite. Dust of any sort is dangerous directly in proportion to its insolubility and its irritating qualities. Limestone dust is readily dissolved by the fluids of the body, and is not at all irritating. Some authorities even claim that exposure to limestone dust is the best of treatment for tuberculosis, and there is some basis for the belief on both theoretical and empirical grounds. Granite dust on the other hand is sharp and insoluble and is responsible in other states for excessively high rates. So far as we can make out there is no reason to believe that occupation has anything to do with the distribution of tuberculosis in Indiana except possibly on a small scale in two or three communities.

Besides the various factors which may have a localizing effect upon the tuberculosis death rates, there are other influences which have a more general effect. Undoubtedly the present craze for a slender figure is adverse in its effect. The death rates is falling at this time in spite of the modern fad. It is noteworthy that the group that is most zealous in its effort to attain a slender figure—girls and young women—is the one showing the highest rates, and the least tendency to improve. There are, of course, other factors at work here, since it is well known that the habits and the

occupation of this group have changed radically in recent years.

Young people are much more susceptible than children—except babies—and those of mature age. This relation is best shown by the accompanying graph.

Figure 26. Graph showing incidence of death from tuberculosis by age, sex and color in 1925 for the United States Registration Area as it was constituted in 1920.

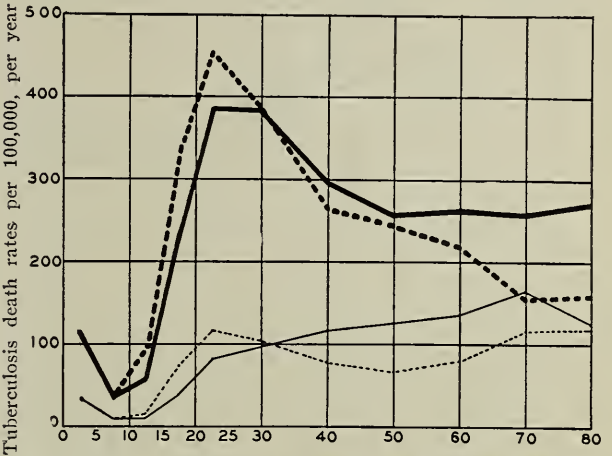


FIGURE 26—Tuberculosis death rates by age, sex, and color. (U. S. Reg. Area, 1925). Note much higher rates of the negro. Also note that females deaths are higher in early life, and male deaths higher in later life.

Heavy black line _____ Colored male rate
Heavy dotted line _____ Colored female rate
Light black line _____ White male rate
Light dotted line _____ White female rate

Season seems to have no great effect upon the time when death occurs, but we may well believe that more cases develop during the months when the population is crowded indoors; when it is getting a minimum of sunlight because of the obliquity of the sun's rays, because so much of the best part of the light is cut off by dirty windows and a smoke-laden atmosphere, and when inclement weather prevents the various out-door sports. As this time also the incidence of the various respiratory diseases is high.

Figure 27. Graph showing deaths from tuberculosis by months.

Climate has a profound effect upon tuberculosis death rates, but this phase of the subject has been adequately stressed. There is not enough difference in the climate of the various parts of the state to make the matter significant in explaining our problems.

The existence of bovine tuberculosis in cattle used for dairy purposes has many times given concern to the public, to the medical profession and to those in the dairy business. The tuberculin testing of cattle can readily detect the diseased animals, and herds can be very easily cleaned of this infection. Furthermore milk should be pasteurized for other purposes and if properly done this kills the tubercle germ. The following maps indicating the amount of bovine infection seem to indicate that this cannot be used as an explanation.

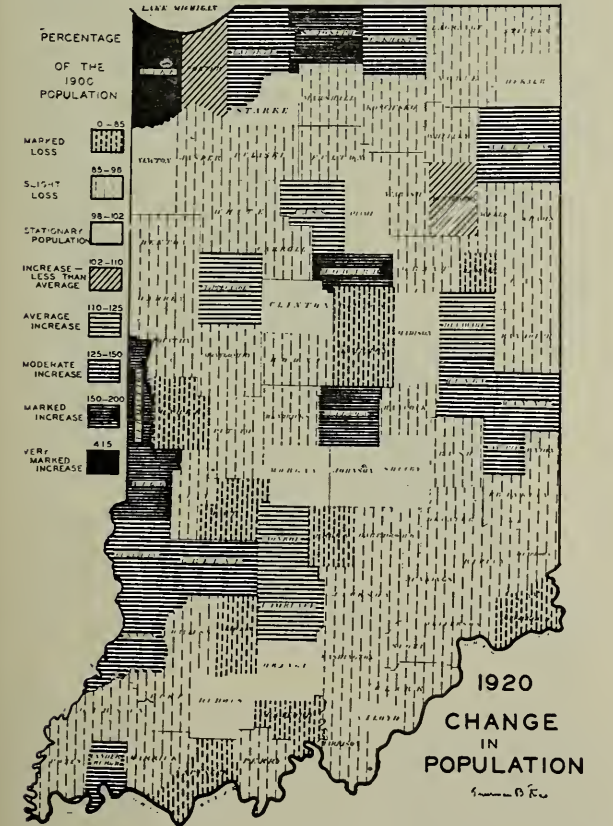


FIGURE 25—Map showing change in population. This is an intricate map and will need some study. Interesting is the fact that a great majority of the counties of Indiana have shown a definite loss in population from 1900 to 1920. Practically all counties without an industrial city have lost.

It is interesting that Crawford county, which is highest in human tuberculosis, is lowest in bovine, and that the northwest corner of the state, which has little tuberculosis except in the slums of the cities of the Calumet district, stands very high in bovine infection. Likewise the map of the United

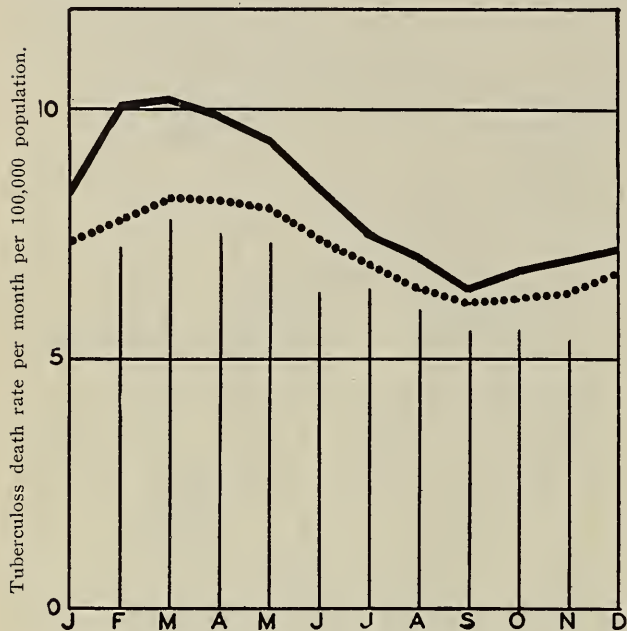


FIGURE 27—Tuberculosis death rates by months of the year.

In this graph all months have been equalized to thirty days. The U. S. Reg. Area graph is for a later period than the Indiana graph (1925 as compared to 1917-1926) and is consequently lower. For the same period it is higher. Black line—Indiana (ten-year average 1917-1926) Dotted line—U. S. Registration Area for 1925

States shows essentially the same reverse correlation.

Figure 28. Map of Indiana showing incidence of bovine tuberculosis in cattle.

Figure 29. Map of the United States showing incidence of bovine tuberculosis.

Avian tuberculosis shows an even more striking reverse correlation, and probably has nothing at all to do with the human disease. The map is shown in the interest of completeness.

Figure 30. Map of the United States showing incidence of Avian Tuberculosis.

SUMMARY

1. Factors which have probably been most helpful in the eradication of tuberculosis are as follows: Better and earlier diagnosis and treatment, the co-operation of anti-tuberculosis societies, improvement in general culture and standards of living, improvement of the economic and sociological status of the population, education of the masses in matters pertaining to hygiene and health, the construction of sanatoria for early cases and of hospitals for late cases, the ministrations of the public health nurse.

2. The determining factors in the peculiar distribution of tuberculosis in Indiana seem to be educational facilities, economic status, living conditions and facilities for transportation. Under-

lying these factors are topography and soil fertility as the ultimate causes.

3. Race and the characteristics and density of population (except in the largest cities) seem to have little effect on the amount of tuberculosis in Indiana. The movement of the population is an important factor in the determination as to where the deaths shall take place—healthy people move, sick ones do not move—except to go to hospitals and sanatoria. Economic factors are inextricably interrelated to the movements of population.

4. Bovine and avian infection are of no import in explaining the distribution of tuberculosis in Indiana.

5. Inasmuch as the counties with the highest incidence are poor and already taxed to the limit of their meagre resources, the solution of the tuberculosis problem in Indiana must come from the more wealthy sections of the state. The following recommendations are respectfully submitted to the medical profession, the health authorities, the intelligent laymen, and the governing administration of the state:

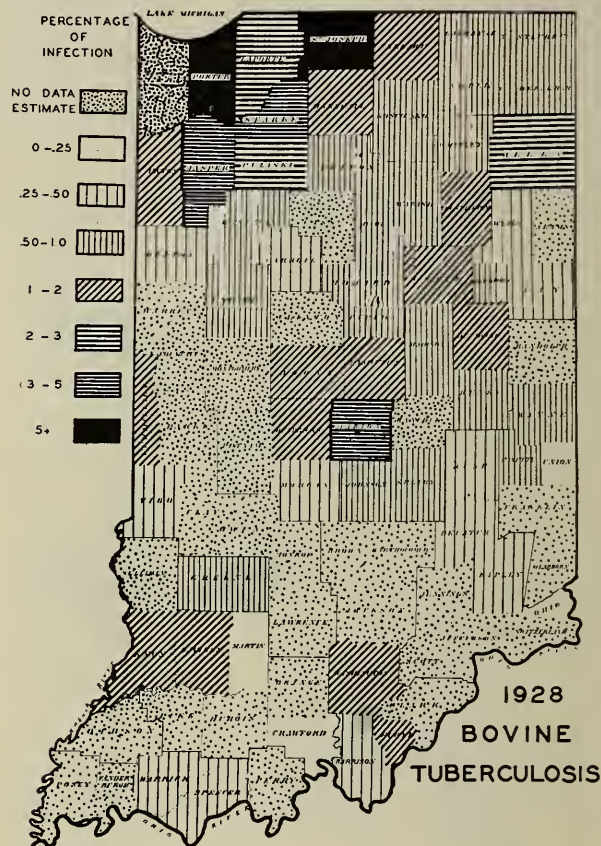


FIGURE 28—Map showing incidence of bovine tuberculosis in Indiana. Information furnished by J. E. Gibson, Inspector, Bureau Animal Industry. In estimating the significance of this map it must be understood that the surveys that have been made to determine the amount of bovine tuberculosis have been made at different times in different counties as it requires a great deal of time to test all of the cattle of the state by the tuberculin method. The shading is to be regarded as being then approximately correct—correct enough to give a good general idea of the situation which is all that is needed for our present purpose. Counties not yet surveyed are dotted in with the attempt being made to estimate the probable shading as judged by the surrounding counties.

- a. Aid to the southern counties in the develop-
ment of industries suitable to their peculiar needs.
- b. The development of the highway system in
this region.
- c. Increased aid for the schools of the poor
counties.

WHAT CAN WE DO FOR THE PA-
TIENT WITH NERVOUS
INDIGESTION?*

WALTER C. ALVAREZ, M.D.
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The physician must first be sure of the diag-
nosis; the fact that the skilled gastro-enterologist
with every form of technical assistance at his com-
mand occasionally makes the mistake of treating
as a neurotic someone suffering from gallstones
or some other serious illness should make the
average man less positive in his opinions. If only
because the physician may be mistaken he should
avoid giving his nervous patients the idea that he
thinks there is nothing the matter with them.
Actually, the patient often is neurotic simply be-
cause for years he has suffered tortures from an
organic disease. Even if the physician finds
nothing, that does not mean that the symptoms
are imaginary. What the physician means is that
they are originating probably in tired brain cells
and not in a diseased stomach. If the person were
operated on nothing grossly wrong could be found
in the abdomen.

If the patient has been overworking, losing
sleep, or living unhygienically, I suggest that he
cut down on work and try a simpler diet, and
see what happens. If everything clears up I shall
be happy; if he doesn't get well or if he gets
worse, I will know that something is radically
wrong and I will have to go over him again very
carefully.

The greatest mistake that physicians sometimes
make is to be harsh and unsympathetic toward
nervous patients, and to call them unpleasant
names. The true physician is always kindly and
able to find something lovable in the most cranky
of his patients. When he does this, they are likely
to respond with the best that is in them and they
then have some chance of getting well. It is a
good thing for the physician to have experienced
a nervous breakdown himself because then he
knows how real and how trying the symptoms
are.

The first step in psychotherapy is taken when
the physician makes a complete and careful ex-
amination. If that shows nothing seriously wrong,
the patient's mind is generally relieved and he
is then willing to put up with his discomforts.
Unless such a careful examination has been made,
the physician has no right to tell the patient not
to worry. It is silly and cruel also to tell the
patient not to worry when, as so often happens,
he is caught in some desperate family or busi-
ness situation from which there seems to be no
escape. If the physician were to be placed in the
same predicament, he would probably be just as

*Presented before the Section on Medicine of the Indiana
State Medical Association at the annual session held in Evans-
ville, September, 1929.

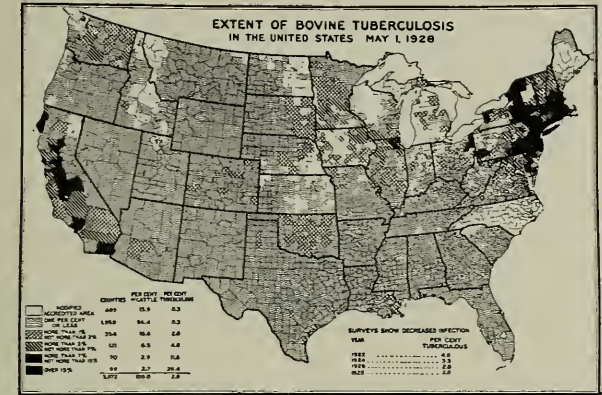


FIGURE 29—Map showing extent of bovine tuberculosis in United States. Map furnished by Bureau of Animal Industry, Washington, D. C.

- d. The establishment in the involved region
of a hospital for advanced cases of tuberculosis,
and a large sanatorium for early cases.
- e. The continuance of public health educational
programs by medical and lay organizations.
- f. The full utilization of the powerful agencies
which can be marshaled by the public health nurse,
the full time health officer, the medical societies,
the Extension Division of Indiana University in
public instruction, the Extension Division of Pur-
due University in helping these people to solve
their agricultural problems, the State Board of
Health, and the Anti-Tuberculosis societies.

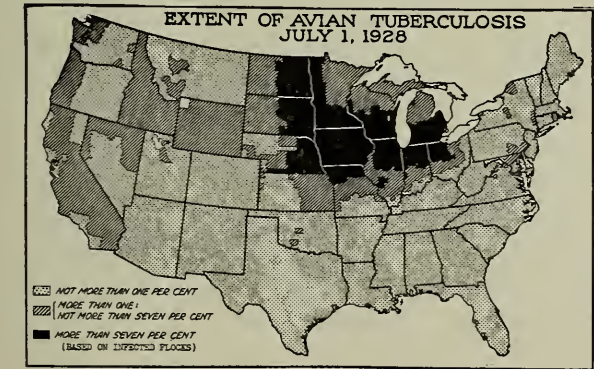


FIGURE 30—Map showing the extent of avian tuberculosis in the United States. Map furnished by the Bureau of Animal Industry, Washington, D. C.

We wish to thank the Indiana State Board of
Health, and particularly Mr. Wright, vital statis-
tician, for invaluable aid in compiling these data.
Thanks are also due to a great many others who
have helped in furnishing information and to
whom credit is given in the body of the paper.
Mr. J. C. Brown helped in the collection of the
data used.

sick in mind and body as is the person whom he is scolding. The physician should investigate carefully and sympathetically the problems that confront his patient and the conditions that have dragged him down. He can often help greatly by giving that comfort and mental purgation that comes with the pouring out of secret worries into a sympathetic ear, and he can help by advising wisely, and by leading his patient out of a maze of muddled thought.

The physician must help the patient also to get the necessary rest with the least expense and loss of income. Half day vacations can often be taken, and it is wonderful what can be done for a tired mother if she will only go back to bed after the children are sent off to school. She may have to go on with her mending and sewing but even so, a few weeks of mornings in bed will often work a miracle. Rest cures in a sanatorium are also helpful but they are generally beyond the reach of those who need them most.

Much can often be done at home with the help of some devoted relative. Moreover, the nervous patient does not do well in a hospital where he or she is awakened at six or seven so that everything can be made ready for doctors' rounds at eight. This is nice for the chef and the doctor, but it is rough on the nervous patient who so often fails to get much rest until the hours between four and nine in the morning.

Another difficulty with hospitals today is that many dietitians rather thoughtlessly stuff their patients with bran, raw vegetables, salads, and fruits. They forget that their guests are to be with them only for a few days or weeks, and that they could easily get along during that time without extra vitamins. My objection to the foods given is that they are the most indigestible ones for many dyspeptics, and that not infrequently they do harm. There is no question that the discovery of vitamins has brought much good, and that with certain types of practice, particularly among the children of the poor, who live on but few foods, the main concern of the physician must be to see that the diet is complete in every way. Among well-to-do persons who live on a wide assortment of foods it is often more important to see that these are easy of digestion than that they are full of vitamins and roughage.

The sick who are so situated that they must either keep at work or starve must be taught to hoard their small stock of energy and to live within the limits of their nervous strength. Many tire themselves out by putting too much energy and emotion into trivial tasks, and women in particular have the habit of getting all stirred up over little things, and of reviewing at great length painful or annoying experiences. Many a woman could easily be restored to health if she would only stop holding "post mortems" over every little event in her life. Others must be taught to go to bed earlier at night, and some must rest in bed on

Saturday afternoons and Sundays. Many take their holidays and week-ends too strenuously and are worn out on Monday morning. As the Irishman said, "How happy we'd be if it weren't for our pleasures."

In innumerable cases, all a patient needs to do to get back his health is to learn how to sleep again. Often for a time these persons need the help of a sedative drug and I think it very unfortunate that so many physicians are still afraid of prescribing the newer synthetics which are in no way related to opium and which, I believe, are rarely hurtful. For years I have used them in my practice and I have yet to see any tendency to habit formation.

Many patients can be helped greatly by the various forms of physiotherapy, exercise, and massage. This work can best be done by a trained physiotherapist under the supervision of the physician.

When first seen by the doctor, many dyspeptics have been starving themselves; they are afraid of almost everything and they must be encouraged to eat again. Often it can be shown them that they are uncomfortable whether they eat or not so they had better eat in order to get strong again. So long as they starve they cannot get strong and well. Nowadays one of the easiest ways of helping those with indigestion is to take away their bran. Physicians forget that it is prescribed simply because it is one of the most indigestible substances in nature; they forget that it was especially designed as a coating to carry seeds untouched through the digestive tracts of herbivorous animals.

The man who is constipated and who at the same time has the digestion of an ostrich can doubtless be greatly helped by the addition of roughage to his diet, but others who have short, inefficient, and irritable bowels get into trouble; they fill with gas, they become distressed, and some lose weight and go downhill.

What the dyspeptic needs often is rest for his digestive tract, and that can best be obtained with a smooth diet that has little residue. We know today that when the intestinal muscle is weak and tired, liquids will still seep through the tube without much trouble, but solid masses cannot pass; they can be carried forward only by well coordinated peristaltic contractions. I am inclined, therefore, to tell a man with a flabby digestive tract or one with irritable, narrow, and uphill places, that he should avoid eating rough foods for much the same reason that he avoids putting paper and bits of wood and cotton down a drain which has a poor drop, or, somewhere in its course, an uphill stretch.

Whatever the reason, a smooth diet certainly does help a great many sufferers from indigestion. It is the sort of diet that Hippocrates, the father of medicine, used in his sanatorium on the island of Cos in the fifth century before Christ.

Following is a diet list and set of instructions which I often give to patients:

THE SMOOTH DIET

This diet is based not only on practical experience but on a number of scientific principles. We have no ferment in the digestive tract which will dissolve cellulose, that is, the fibrous part of vegetables and fruits. Most of this material is quite indigestible, and if we eat much of it we throw a heavy burden on the bowel. This fiber interferes with the digestion of starches and predisposes to flatulence.

If there happen to be narrow or spasmodically contracted places in the bowel the fiber may cause clogging and back-pressure. The ideal diet in such conditions is one which leaves only a small liquid residue which can trickle past the obstructions and in this way bring relief. This diet is indicated also when the bowel is irritable, overly active and overly responsive to every stimulus.

It should be tried out faithfully at first, and then if it works well other foods may be experimented with, one at a time. If you have learned by experience that some of the foods allowed on this list are hurtful to you, leave them alone.

If you are to give this diet a fair trial, eat no coarse foods with fiber, skins, seeds, or gristle. Avoid salads with celery, cucumbers, and pineapple, also many of the green vegetables, raisins, berries, jams full of seeds, nuts, and many of the raw fruits. Beans, cabbage, onions, peppers, melons, cucumbers, and peanuts are notoriously gassy.

If you are living in a boarding house you can follow this diet by avoiding forbidden foods and eating more of the digestible ones which are put before you.

Avoid sugar in concentrated form and take no candy or other foods between meals. Hot cakes and waffles might not be bad if they were well chewed and not eaten with so much syrup. Fried foods are not bad if they are properly fried, that is, totally immersed in fat at the right temperature.

Avoid eating when in a rush, when very tired, or when mentally upset. Family rows should be held away from the table. Chewing gum may cause distress because air is swallowed with the saliva. Digestion is greatly helped by a good chewing surface. If there are gaps in your teeth have your dentist fill them with bridges. The taking of purgatives should be avoided as they sometimes cause flatulence and abdominal distress.

FOR BREAKFAST

You may have orange juice or grapefruit (avoid the fiber in the compartments). Cantaloupe and other melons are inadvisable. Coffee, if desired, is allowed in moderation; it sometimes causes flatulence. If you are sensitive to caffeine try "Kaffee hag" or postum. You may have chocolate, cocoa or tea, one or two eggs with bacon or ham, white bread, toast or zwieback with butter, any smooth mush such as farina, cream-of-wheat, corn meal, or rolled oats, also puffed cereals or cornflakes. Shredded wheat biscuits and other coarse breakfast foods are not allowed. Bran must not be used in any form. Graham bread is permitted, but not the coarser whole wheat bread.

FOR LUNCH AND DINNER

In fruit cocktails avoid the pieces of orange and pineapple. Broths, bouillon, cream soups, and chowder are allowed, also meat, fish, chicken, eggs, and oysters. Eat no smoked fish or pork. Eat crab and lobster only if you know that they agree with you.

Bread and butter are allowed, also hot biscuits if they are made small so as to consist mainly of crust. You may have potatoes (baked, mashed, hashed-brown, or French fried), rice, sweet potatoes, hominy, tomatoes (stewed, strained and thickened with cracker or bread crumbs) asparagus tips, beets, turnips, creamed spinach, Italian pastes such as noodles, macaroni, and spaghetti (cooked soft), and purees of peas, beans, lentils, lima beans or artichoke hearts. Sweet corn may be used only if passed through a colander. There are practically no

other vegetables that can be pureed to advantage. Very tender and digestible string beans can now be secured in cans. They are fine for salads.

No salad should be taken at first. Later you may try a little tender lettuce with tomato jelly, hard boiled egg, tomato, string beans, pears, or chopped apple. Mayonnaise and French dressing are allowed. Potato salad without onions is permitted.

FOR DESSERT

Take simple puddings, custards, ice cream, jello, plain cake, and canned or stewed fruits, particularly pears and peaches. Cottage cheese is permissible; other cheese often cause trouble. The filling of apple, peach, apricot, custard, or lemon cream pie may be eaten.

In case of constipation, stewed fruit may be taken once or twice a day. In winter the dried pared fruit may be used for stewing. Prunes are probably the most laxative of fruits and if eaten every other morning they will relieve many cases of constipation. They should be cooked slowly until they almost go to pieces. Apple sauce is much more palatable if made from unpared and uncored apples. The sauce is strained later. It is more palatable also if mixed with a little tapioca or sago. Apples may also be eaten baked. Blackberries and loganberries can be stewed and strained and the sweetened juice thickened with cornstarch. This makes a delicious dish with the full flavor of the berries. Later you may try fully ripe pears and peaches. Bananas are digestible when cooked or when fully ripe.

Make no effort to drink water. Be guided by your thirst. Avoid excessive use of salt, pepper, or other seasoning. If you wish to gain in weight eat as much cream, butter, fat, and starch as you can. If you wish to lose weight or to stay thin, live largely on the vegetables, fruits, and salads, with a moderate amount of lean meat each day.

Many persons appear to suffer from flatulence and indigestion simply because there is always a plug of fecal material blocking the outlet of the intestinal tube. If they could only clear out the last ten inches of the bowel without upsetting the first twenty feet or more they would be well. When they fill the bowel with rough food or when they take laxatives every night the treatment is often worse than the disease. I say to them: "But why do you not use enemas? They empty the lower bowel without disturbing any other part of the tract." The answer is generally either that several physicians have warned them of the horrible results of taking enemas, or else that enemas give distress or fail to bring results.

The commonly expressed fear of enemas is not based on facts, so far as I have been able to learn. I have never seen anyone injured by them nor have I ever seen such a case demonstrated. Some of the men who cry out most loudly about this danger do not object to giving enemas in the office for a consideration.

Many of the persons complaining of indigestion have such a sensitive colonic mucosa that pure water or soap-suds irritates it a great deal and the patient continues to pass mucus at frequent intervals for two or three hours afterwards. If these persons are taught to add a rounded tablespoonful of salt to the bag full of water they will rarely experience distress afterwards and many will then find enemas very helpful.

Sometimes they fear and hate the procedure because some physician has told them that they

must lie down and must hold the water for ten minutes after it is put in. When they learn that an enema can be taken in a few minutes while seated on the toilet bowl much of their dread of the procedure will disappear.

It is important, also, when treating these patients, to relieve their minds about the largely mythical dangers of auto-intoxication. Often these persons can be greatly helped if they can be taught to be satisfied with three good bowel movements a week. Nature never intended many women to have a movement once a day; some do not eat enough to make a stool every twenty-four hours.

I have little faith in drugs and I seldom use tonics. I never use strychnin, pepsin, pancreatin, or bismuth. Patients who cannot be helped by rest, proper dieting, and better hygiene are generally suffering from some organic trouble such as gall-bladder disease which can best be relieved by surgical treatment.

BLOOD VESSEL SURGERY*

(REPORT OF THREE CASES)

JAMES Y. WELBORN, M.D.
EVANSVILLE

Horsley, in his classical work on surgery of the blood vessels, gives a very interesting account of the history of this field. He states that the first recorded use of the ligature was in 1500 B. C., while it was not until 1759 A. D., that Hallowell, an English surgeon, first sutured an artery in man. In 1881 Gluck renewed efforts to repair wounded vessels, using small ivory clamps to close the wound. In 1897, Murphy succeeded in making an end to end anastomosis in man. Carrel in 1902 published the method with which he obtained very good results. Other surgeons also made important contributions, and the appearance of Horsley's monograph on blood vessel surgery in 1915 was the culmination of a series of brilliant advances in this field, most of which were made by American surgeons.

The essential principles of blood vessel surgery are the use of very fine sewing needles and fine silk, sterilized together in vaseline; the use of the double mattress or cobbler's continuous suture, with eversion of the walls of the vessel so that their intimas are in approximation and there is a minimum of suture material exposed within the vessel. The work must be rapidly and neatly done, to avoid thrombosis.

While I have never claimed to be especially qualified in this rather difficult field, yet I have felt it my duty to be prepared to meet any emergency which might arise, and aim to give the patient the benefit of modern surgical advances. In the last sixteen years, I have performed blood vessel surgery on three patients, two of whom are here today.

My first case was a sixteen-year-old boy who was accidentally shot, December 12, 1913, with a .22 long rifle. The bullet grazed the right thigh, went through the posterior portion of the scrotum and entered the left thigh in Scarpa's triangle. The wound of exit was on the external aspect of the left thigh. The testicles and femur were uninjured. The hemorrhage at once was very free and the young man stuffed a pocket handkerchief into the opening, from which came the spurting blood. This must have, in a measure, checked the hemorrhage, and then with the help of a companion he walked some distance to a road, and was soon after attended by the family doctor. Under the care of Doctors Muelchi and Dome of Tell City, Indiana, he suffered much from the loss of blood and remained in an uncertain condition for a number of days, and there was no great amount of hemorrhage following. On the 13th day, on account of the presence of infection, the doctors made an incision which showed a very large hematoma; a profuse hemorrhage followed at once and could be checked only by very tight packing of large pieces of gauze. The next day the patient was brought to our hospital and I performed the following operation: An incision was made over Scarpa's triangle, and a careful dissection was carried out, exposing the large vessels. At the moment of exposure, the thrombus was thrown out of the femoral artery, and blood spurted in all directions. Considerable pus was now cleared away. The internal saphenous vein, which was button-holed on both sides, was ligated. The femoral artery had been injured by the bullet, and there was a laceration in it about one-fourth inch long, the opening being plugged by a clot. It is presumed that this clot formed early and therefore saved a part of the circulation at the time of the accident, which protected in a way the circulation of the leg. The artery was therefore temporarily ligated two inches above the lesion, and the opening in the artery was carefully closed by the use of the specially prepared silk, as mentioned in this paper. The first layer closed the intima, which I think is the most important part of the suturing. The second layer of sutures brings together more perfectly the walls of the artery, then the third layer of linen gives another reinforcement to the more delicate sutures. As is advised by Dr. Horsley, about ten minutes time was given this sutured portion of the artery before the ligature was removed; and this was done very slowly, so as not to make too much strain on the newly sutured portion. After a few minutes of complete circulation throughout the leg, the other tissues were sewed over this artery, and the opening was considered completely closed. The patient's general condition was poor before and immediately after the operation, but he rapidly improved after hypodermoclysis, and convalescence was uneventful, except for moderate low grade infection of the wound with healing by

*Presented before the Section on Surgery of the Indiana State Medical Association at the annual session, Evansville, September, 1929.

granulation. At no time was there any marked swelling of the leg.

Re-examination at this time shows the legs to be equal in size and function. The patient states that within six months after leaving the hospital, he joined the army and saw active service in the Philippines and excelled in boxing and in swimming.

My second patient was a man, seventy-eight years old, with generalized arteriosclerosis, who developed thrombosis of his popliteal artery, from which I removed a thrombus two inches long, and sutured the opening. The circulation was restored and the foot became warm, but later, thrombosis recurred, and amputation became necessary for dry gangrene.

My third case was a nine-year-old girl who was stabbed with a pocket knife in the inner aspect of the lower third of the right thigh. The accident occurred September 5, 1926, and I first saw her the fifteenth of the same month. She had bled freely at the time of the accident, but there had been only slight oozing since the first day. Examination showed a discolored area about two inches in diameter located about three inches above the right knee on the internal aspect of the thigh. There was local evidence of infection and some fever. Palpation showed marked pulsation and a definite thrill over the discolored area, and auscultation showed a loud bruit which was transmitted upward to Scarpa's triangle and downward to the foot. A diagnosis of traumatic aneurism of the popliteal artery was made, and the patient advised to return for operation when the acute infection had subsided. She returned ten days later, because of a severe hemorrhage that morning and was very pale and weak. She was treated for her severe anemia until October 11, when the following operation was performed: An incision about six inches long was made on the inside of the right thigh just above the knee. That portion of the vessel, which had become an aneurism, about the size of a large plum, being at least three-fourths of an inch in diameter and about one and one-half inches long. This sac was completely exposed and opened and all the blood clot, organized and unorganized, was removed. The tourniquet was then released, allowing the fluid blood to wash out completely all of the small clots that might be lodged in the walls. After again applying the tourniquet tightly, the opening in the artery was closed with two layers of the fine oiled silk, according to the technique of Horsley. The capsule of the aneurism was then trimmed and sutured over the artery with No. 00 catgut. The tourniquet was removed after a lapse of ten minutes, which gave time for the wall to agglutinate, a point which was always emphasized by the author of the quoted text.

The wound was then closed in layers without drainage. She stood the operation quite well, considering her anemia, and made an uneventful re-

covery. The skin sutures were removed on the eighth day and she went home on the ninth day following the operation and has had no trouble since.

In both of my successful cases, high amputation of the lower extremity would have been necessary had it not been for the repair of the artery. This would have been a serious calamity for these young people, and I am happy that it was avoided.

THE TREATMENT OF GLAUCOMA*

HUGH A. KUHN, M.D.
HAMMOND

It is stated that in persons past forty years of age, twenty-five percent of blindness is caused by glaucoma. Much progress has been made in the prevention of blindness caused by industrial eye injuries, ophthalmia neonatorum, brain tumor optic atrophy, but none of the groups of persons concerned with conservation of vision has given publicity to the ravages of glaucoma, its frequency and sureness in causing blindness.

The importance of careful eye examinations by competent oculists needs no stressing in this group—we know that the uncharacteristic symptoms of indefinite type make its recognition difficult, unless we include a careful history, examination of the anterior segment of the eye, the ophthalmoscopic examination of the media, nerve head and retinal vessels, a taking of the visual field with a perimeter, a finger palpation, and a tonometer measurement of tension, we will miss the diagnosis in its early and most manageable period. The "blurring" complained of by patients coming for refraction is often due to a tension—they attribute it to overuse of the eyes and we are prone to explain it on the same basis or of migraine, uncorrected astigmatism, muscle imbalance, accommodation insufficiency, etc. And in a great many cases it is, but the same symptoms are given by the transient steaminess of cornea of glaucoma and must be differentiated if we are to give the best service that is expected of us.

"The essence of glaucoma lies in the increase in the intraocular pressure, from which all the other essential symptoms of glaucoma can be deduced. In one series of cases the increase in pressure sets in without our being able to discover any reason for it in an antecedent disease of the eye (primary glaucoma). In other cases, on the contrary, the increase in pressure is the result of some other disease of the eye (secondary glaucoma). Primary glaucoma, accordingly, has increase in tension as its first and most important symptom, from which all the rest of its phenomena arise—it is glaucoma proper, the glaucoma par excellence. In secondary glaucoma, on the contrary, the increase in tension is only a consequence

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of other pathological conditions—is an accessory, as it were. The clinical picture of secondary glaucoma, therefore, is exceedingly polymorphous, varying according to the different affections which form the basis of it. While genuine or primary glaucoma always affects both eyes, although not always at the same time, secondary glaucoma remains confined to the eye which, by being diseased, has caused the increase in tension. The diagnosis of glaucoma is based mainly on the demonstration of its cardinal symptom, increase of tension, by palpation or by the tonometer."

The Therapy of Glaucoma. For purposes of management, primary glaucoma falls naturally in three divisions, that of acute inflammatory, chronic and simple.

In acute inflammatory glaucoma the indication is always for operation. However, as in all instances of tension, attempts should be made to bring the tension down before operation. The use of miotics will practically control the tension and increase the depth of the anterior chamber, facilitating surgical procedure, and the cornea will often clear enough to increase visibility.

In cases of arterial hyper-tension, or when the intra-ocular tension cannot be reduced properly, we have had fair results by doing a phlebotomy, drawing as much as 500 c.c. of blood. This coupled with diuretic measures and the use of five percent salt solution intravenously will often lower the tension considerably. In my experience, if these measures proposed in inflammatory glaucoma will not decrease the pressure, the prognosis is bad. In this type of glaucoma, the most exact indication for treatment exists and that is operation. The operation varies with the operator, some, as the late Dr. Reese, do a deep iridectomy with removal of a piece of sclera. Others do a LaGrange operation or a trephine with various manifestations. An iridectomy should not be made without the use of a sub-conjunctival injection after holocaine or cocaine in the conjunctival sac. After the incision, the introduction of a few drops of five percent cocaine with a spoon into the anterior chamber greatly lessens the risk of pain. It is very important in a great increase of pressure to decompress very slowly and if the knife is held in the incision for several seconds, the risk of expulsive hemorrhage and prolapse are lessened. If the patient is carefully instructed to keep up a regular breathing, there is also less likelihood of the preceding complications.

Chronic inflammatory glaucoma I prefer to carry under a medical treatment if possible, using one-twentieth percent eserine salicylate solution or two percent pilocarpine, and if the tension can be controlled by two installations daily, it is comparatively safe to carry the case over a period of time. Chronic glaucomas are generally found among persons of a nervous and worrisome nature, often among those who have kidney lesions with cardiac disturbances. In tension cases with defin-

ite arterio-sclerosis, if added to their medical ocular regime, they are given plenty of rest, an improvement of their physical condition and avoidance of worry and excitement, prognosis without operation is better. However, if vision is less, if the field of vision defect advances, or the tension stays up, we had best operate at once. In cases of no defect in vision or field, conservative treatment must be kept up persistently. I would not operate in such cases. An iridectomy with an excision of sclera after the method of LaGrange is the most accepted procedure.

Simple Glaucoma. In a recent article, Parker states that the average results from surgical treatment of simple glaucoma, all stages of the disease included, sixty percent will have a satisfactory reduction of tension and the integrity of the globe maintained; in thirty percent the condition will be uninfluenced by operation, and in ten percent, may be made worse. It is unfortunate that these cases usually have very definite changes when the patient comes under observation. If by miotics, we are unable to suppress tension and field changes, operation must be considered. If it can be controlled, the patient should return for frequent pressure readings and fields every two or three months. Cases have been reported that have been under medical management for ten and twenty years with maintained good vision and then with a rapid decrease of vision and increase of pressure which could not be controlled, a large percentage of these old cases were lost in spite of the controlling of tension. This has brought many of the more experienced operators to the consideration of early operation in simple glaucoma, preferably when there is a minimum contraction of field. Stock calls attention to cases of high myopia with glaucoma simplex and cautions that in elderly patients with high myopia and wide pupils, complaining of visual disturbances, one usually blames the myopia but if a field and tension are taken, many of these cases show a simple glaucoma and that these cases that have been treated by mild miotics with improvement are really glaucomatous cases. He also is strongly in favor of the use of pilocarpine over eserine and mentions cases with contracted pupils by eserine, whose tension remains high, but comes down with pilocarpine. Also in this type of glaucoma, a lack of response to medication usually means poor results from surgery. An Elliott trephine or cyclodialysis is the surgical procedure of choice.

Secondary Glaucoma. The clinical picture of secondary glaucoma varies with its cause. There is often mild secondary glaucoma with palpable increase in tension during iritis, iridocyclitis, interstitial keratitis, and most acute inflammations. The management of these cases is dependent on their etiology and particularly whether the causative disturbance is yet active. In an iritis, if still active, the iritis treatment must be pushed to its

limit. If chronic, as in a keratitis, where the treatment cannot be forced, a temporary discontinuance or a stoppage of the atropinization is usually sufficient to lower tension. We must here be cautious in stopping the iritis treatment as there is a liability of permanent synechia.

The more inflammation present in the iris, the less it is indicated to stop atropine and start pilocarpine. Often a tiny puncture, three m.m. from the limbus with a keratome into the anterior chamber will soften the eye enough to enable us to force the iritis treatment. This procedure can be repeated a few times, or, if the iritis is old, and there is organized tissue in the filtration angle, and anterior sclerotomy or an iridectomy is indicated.

In the secondary glaucoma after needling, ice compresses will often enable one to wait until more lens substance is in the anterior chamber before doing an expression of lens. In secondary glaucoma, after cataract operation, cyclodialysis has given us our best results. It is due to the anterior chamber being too long in reforming with peripheral anterior synechia. In secondary glaucoma, after thrombosis of central vein, if the patient can still see something, an Elliott trephine may be tried but all operative procedures are often the cause of hemorrhage and result in enucleation. After tumors, as soon as a diagnosis has been established, enucleate.

Complications of the Operation. The operative complications are: Hemorrhage into the anterior chamber; into the fundus, especially in the macular region—this is often the cause of decrease in vision after glaucoma operations; and expulsive hemorrhage. Infection: Often in glaucoma it is urgent for an immediate operation and careful study of tear sac conditions and the removal of the sac, if necessary, can be done. Bacterial cultures and the sealing of the canaliculi with the electric cautery or a syringing of the tear sac is often as much as can be done to ward off immediate infection. Late infections have been one of the risks of both LaGrange and Elliott operations. It often begins with an acute conjunctivitis and an infection in the flap. An electric cauterization of the flap coupled with milk injections is the best procedure to follow. All LaGrange and Elliott operations should use a mild solution of zinc sulphate daily for the rest of their lives and a prophylaxis.

Post-Operative Complications. A good operation may be done and the tension stays up. The operation must be repeated, doing another type of glaucoma operation. When the tension will not come down after an iridectomy or an Elliott, it is probably best next to do a cyclodialysis after the method of Heine.

Simple glaucoma may develop rarely into a painful eye after operation. This belongs in the group of cases which we class as malignant glaucoma. A low grade iritis sometimes comes on and

is continuous. It is best to give a mild iritis treatment. We use homatropine and adrenalin.

After a successful operation in which the pre-operative field of vision shows a scotoma extending to the fixation point, there may be enlargement of it past the fixation point. This is one of the most embarrassing post-operative complications of a glaucoma operation.

In cases where medical control fails and after operation there is no remission of symptoms but a progress to blindness in spite of all, the diagnosis of malignant glaucoma is made—one cannot pick out these cases but if such an occurrence happens we can be guarded about attempting operation on the second eye in cases of symptoms.

CONCLUSIONS

a. Glaucoma occurs more frequently than it is diagnosed early enough to preserve maximum vision.

b. In simple glaucoma the treatment suggested is medical with operation held in reserve except for the acute inflammatory type when operation is indicated.

In secondary glaucoma the indication for treatment varies with the etiology.

OUR WIVES!*

GEORGE F. BEASLEY, M.D.

LAFAYETTE

No member of the body politic occupies such an anomalous position as the doctor's wife. She must combine the assurance and suavity of a trained diplomat with the meekness of an angel. She must be all things to all people, slighting none. She must be capable and have tact, to make each feel that he or she is the chosen one. This equipoise she must carry in season and out.

She must engage in all things for the betterment of her community; in the sewing circle making underwear for the primitive South Sea islander, leading the grand march at the Charity ball, Wednesday night assisting in the mid-week devotional services, Thursday afternoon making a strenuous effort to win the prize at the bridge club, prompt at the services of her church on Sunday morning, in the afternoon teaching the infant class in the suburban Sunday School, a leader in the plays given by the Dramatic Club.

She must be a past master in the culinary department, an adept with the needle, hence she always is found at the church dinners and bazaars doing her part in drawing the loose change from the pockets of the attending crowd.

Since the right of franchise has been granted, none is more zealous than she, so proven by the last political land slide she helped to put through.

In fact, she must be omnipresent, though at the same time keep her house in order, her children clothed and properly fed, see that her husband is

*A toast delivered at a medical banquet by one of the oldest members of the Indiana State Medical Association and referred for publication in *The Journal*.

in proper shape to attend to his duties, with shirt and collar immaculate, the four-in-hand properly tied, the scarf pin at proper angle, hat brushed and properly creased, clothes brushed, shoes shining and with plenty of clean handkerchiefs. While this is being done she wears a smile.

It has been said, "One may smile and be a villain." Not the doctor's wife for she is on the line of the angels. How could we get along without her?

I knew a doctor who, dissatisfied, was granted a divorce in the forenoon, but before night repented and married her again. Another when his first wife died, married her sister. When she passed away, he took another and last of the family, and then he died.

The doctor who has the right kind of a wife has a jewel, one without price. But like all gatherings some queer misfits will get in. In a neighboring city, at an afternoon gathering one of these misfits was present. Some one said, "Is there much sickness, Mrs. Esculapius?" "Oh, yes," she exclaimed, "and the doctor says if it keeps up he will get me a new parlor carpet." Another said, "If sickness keeps up we are going to get another automobile." Another said, "My husband has twelve new medical books, and when he finishes them he will be as smart as the rest of the doctors."

At a breakfast table, while the husband was sipping his coffee his wife was perusing the society and obituary columns. "Oh!" exclaimed the wife, "the poor soul!" "What's the matter now?" asked the doctor. "Just listen," replied the wife. "Died yesterday morning, Mr. David Howback, leaving a widow and eleven children. The widow is inconsolable, because in all their married life of more than forty years she never knew him to be angry or use any violent words." What a monotonous life the poor woman has led."

Who is it that looks after our moral welfare? Our wives.

Who when we are among the many at a promiscuous gathering and who, when we are enjoying a tete-a-tete with a debutante, when it seems as though we were living our youth again, and the warm blood again rushes through our veins and, as we bend, as of yore, to whisper soft words in willing ears, lightly taps our shoulder and with soft but icy tone, bids us to be excused and marches us away, subdued and humble? Our wives.

Who in the hours, so often frequent, when trials, troubles, disappointments, crowd close and bear us down, who is it that in those trying hours speaks cheering words, helping us hold our faith in front of disaster? Our wives.

Who when times are hard, and grateful patients fail to respond with a sufficiency of the filthy lucre to make the ends easily met, makes over the last year's hat, remodels the old gown, and comes out as blooming as a rose? Our wives.

Who when Morpheus claims our attention, and

the late wars the girls were as faithful as those pockets, swiping them clean and then spends the plunder in a new wrap? Our wives.

Who when the night is cold and stormy, keeps the fires bright, the lunch hot and savory, that the poor boy may be refreshed? Our wives.

Who, when worn and weary, nerves racked for want of rest, bathes our throbbing brow to peaceful slumber? Our wives.

Who, when during the wee small hours the telephone begins its infernal clatter, slips noiselessly down, shuts it off, then proceeds to investigate the financial standing of the patient ere she breaks your slumber? Your wife.

When your first born persists in making your life a burden and the stilly night a pandemonium with his untimely and unearthly yells, who protects your rest by surreptitiously administering a dose to quiet your offspring and maintain peace in the family? Your wife.

Who is it, when you have lingered long at the club where you saw through the bottom of a glass darkly, and on reaching your home, finding the latch key hole missing, you begin a tirade, the door automatically flies open, a small, but firm hand yanks you in before the neighbors are aroused? Your wife.

When morning comes and with it bursting headache, each hair pulling at a different angle, your mouth filled with the old brown taste, who is it that bathes your head with cooling lotions, and with dainty morsel coaxes back your appetite? Your wife.

Who later, when reason has returned, after sending word to the office that you have been taken sick suddenly and unfit for work, sits down by your side, holds your hot feverish hands, and reminds you of the vows and promises made when joined in holy wedlock? Talking thus makes you feel like you were a wretch undone, and that you never again would commit the sin. Who would go through all this but your faithful wife?

In the Civil war I did my part as a medical officer in the navy, attached to the Mississippi squadron. During the last portion of the war I was attached to the flagship Black Hawk. The ward room mess numbered about fifty. A few, the older, were married, but the majority, in the early twenties, were single. All were full blooded, full of life, and the milk of human kindness. All remembered, "The girl I left behind." In fact, judging from the amount of mail that came addressed by delicate hands there were a lot of girls that had been left behind. I wonder whether in the late wars the girls were as faithful as those of '61 to '65. How those wives and sweethearts cheered us and the memory of them helped pass many a weary hour. Hence this toast always was given:

"Here's to our sweethearts and our wives,
May our sweethearts be our wives,
And our wives always our sweethearts."

THE JOURNAL*of the***Indiana State Medical Association**

Devoted to the Interests of the Medical Profession of Indiana

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EDITORIALS**STANDARDIZATION OF HOSPITALS***Its Relation to Reduction of Morbidity and Mortality Rates.*

In the final analysis the aim of the American College of Surgeons is to reduce morbidity and mortality by raising the standard of work done in our hospitals through the selection of staff members who are reasonably trustworthy as a result of education and training. The prohibition of fee splitting among Fellows of the College in a measure is a side issue, though a means to the greater end of better service, for it is a recognized fact that the bartering of patients, so common among those who give as well as receive commissions, comes very far from being trustworthy in affording proficiency and the best results in a very large proportion of cases. However, the standardization of hospitals by the American College of Surgeons, while it unquestionably has been the means of improving conditions, comes very far from being all that it is reputed to be, and for the reason that so often it is a farce. Likewise the fee-dividing proposition seems to be one that the American College of Surgeons is inclined to handle with gloves, for no one doubts that fee-dividing is rampant among surgeons, even among many of the elect who claim fellowship in the American College of Surgeons. We confess that we have a good deal of sympathy for the qualified and experienced surgeon whose ethical conduct is above reproach and yet is obliged to compete with the fee-dividing surgeon of less training and experience who is permitted to operate in and even be on the staff of the same hospital which boasts of being standardized by the American College of Surgeons. The whole trouble can be traced to failure on the part of the College in living up to its professions and enforcing its standardization policies. Such a hypocritical attitude disgusts a great many very competent and ethical surgeons who endorse the principles of the American College of Surgeons because they desire to see suffering humanity receive trustworthy services. The general mortality and morbidity rate will not be lowered as long as hospitals permit incompetent and illy trained

men to operate, and if the American College of Surgeons is unable to enforce its policies very generally, then it is time for that organization to go out of business. On the other hand if hospitals will not exercise some selective judgment in prohibiting unqualified physicians from doing major operative work, then they too are open to censure for they are not looking out for the best interests of patients.

ANESTHESIA DEATHS

It is reported that an attempt will be made to reduce anesthesia deaths by having boards of inquiry in hospitals to investigate anesthetic fatalities which up to now have been hushed up through fear of coroner's investigations and damage suits. Just how much this inquiry will accomplish remains to be seen. Every conscientious physician desires light on the causes of some inexplainable deaths, but, as has been intimated, the findings in some cases, even when no charge of negligence or lack of ability can be established, are detrimental to the attending physicians. Unpleasant sequels sometimes arise through the action of the coroner, relatives or friends, and last but not least the unfriendly and vicious remarks and opinions of confreres. It may be a written or unwritten law for physicians to uphold each other but experience shows that most physicians take a secret delight in seeing their confreres in trouble even though they do not, as frequently occurs, aid in fomenting it or perpetuating it. We are strongly in favor of disciplining and penalizing physicians who willingly and intentionally do wrong, but our judgment in this respect seems to be biased through a knowledge that so many times the innocent suffer at the hands of fellow practitioners without deserving it. It is entirely possible that some anesthetic deaths, if investigated, would add much to our knowledge concerning methods to be employed to insure greater safety, but any scientific investigation of anesthetic deaths must be free from some of the embarrassing features that just now encourage a forced lack of interest through fear of the results that may damage the professional and economic position of the physician or physicians associated in the anesthetic fatality.

BUYING GREATNESS

It really makes us smile when we receive a communication, written upon a beautifully engraved letterhead, to the effect that after carefully analyzing qualifications, accomplishments, and general reputation, we have been selected to fill a place in a book to be devoted to the biographies of only the most eminent people. After reading a lot of this "applesauce", which generally precedes a visit by a glib representative who pours forth more "applesauce," we learn that this stupendous undertaking of separating the sheep from the goats,

or picking out for representation only the *crème de la crème* of the great, has entailed enormous expense which of necessity must be met by those who are interested in the enterprise. We then are adroitly informed that to be included in the list of the great will cost anywhere from two hundred to a thousand dollars, larger amounts usually being the fees when the "applesauce" and frills are most pronounced and the intended victims have been sized up as to how much of the gaff they will stand.

A man's reputation for greatness in any line of human endeavor must rest on a very poor foundation when he has to employ the services of a press agent to let the world know just how great he really is, or thinks he is, and how fitting it is that his name should be included among the *crème de la crème* of notables. If any physician is vain enough to buy his way into a book reputed to be a directory of the great ones, what a rude awakening comes later if it is discovered that a millionaire proprietary medicine manufacturer having no record of possessing either brains or conscience, and whose principal accomplishment consists in dazzling the populace with wild expenditures of money for lavish and intemperate living, also has been able to buy his way into the directory of the great. The whole thing is nauseating. It has been said that money will buy anything, but there is evidence to prove that the statement is false. At all events we are not willing to lose our self-respect by *buying* our way into a reputed directory of notables, even if we had the unmitigated nerve and were vain enough to think that we are entitled to such representation.

MECHANIZED MEDICINE

In all fields of human activity economic problems, including those of organization, press for solution these days. In this respect medicine is no exception. Though vast numbers of people, for one reason or another, do not receive adequate medical attention, the physicians, on the other hand, are finding themselves in an increasingly difficult position. Their education is expensive, an increasing amount of costly equipment is needed, much free work is done and many bills are never collected. It is said that the throat specialists of one great city, in this most prosperous of all periods of history, are called upon to perform a majority of the tonsillectomies without any charge to the patient.

At the same time patients of moderate means are complaining in ever more insistent tones of the cost of medical care. That only the very rich and poor can bear the mounting expense of operations, x-ray, and the like, has become a perfect truism of conversation, yet we fear that the truth of the remark is making large numbers of intelligent laymen increasingly bitter against the medical profession.

What, then, is the solution of this difficulty, of

this most annoying paradox? Offhand the layman would say that medical practice must go through the same evolution that industry followed a century ago. As the artisan or craftsman gave way to the factory system, so must the medical practitioner. Indeed, there are many signs, whether the doctors like it or not, that something of this kind is beginning to happen. So-called groups, or clinics, and institutions are springing up all over the land. If the doctor is underpaid and the patient overcharged under a system of extreme individualism, the obvious way out would seem to be to temper these rigors by group, or collective, effort. Indeed, the more radical social reformer insists that the true ultimate solution is state medicine—that is, a public system of medicine, precisely as we have public schools now.

But large elements in the profession itself are outspoken against these tendencies. They say that human beings cannot be treated by the same routine that is used in inoculating hogs against cholera, and that the last refuge in individualism which we have is when we become sick and go to a practitioner. Medicine, they say, is an art as well as a science and an art cannot be practiced on a factory system. When people are sick they need more than the routine attention of a salaried employe of a corporation, even if that employe happens to possess a medical degree.

To all this there are many obvious replies, centering around the thoroughness possible in an institution which includes all kinds of specialists and the most expensive modern equipment. Then, too, though the doctors in such a place may be "nothing but salaried employes", they can at least concentrate on the business in hand and not worry about uncollected bills. But the adversaries of mass medicine persist in their attack. Especial objection is registered against advertising by health institutions and clinics as being the opening wedge in the mechanization and commercialization of medicine. The layman can never be persuaded that there is anything unethical in advertising by a philanthropic or other irreproachable, non-profit-making medical organization, but it gives the institute or clinic a distinct advantage over the individual, for in the profession advertising by its members is stamped deep as unethical.

Into this far-reaching quarrel we have no occasion to enter except to urge on behalf of the public that the physicians, public-health workers, dentists, nurses, hospital authorities and others involved persist in their efforts to find a way out. Heretofore even the fundamental facts upon which an unbiased judgment could be reached were lacking, but this defect is, in way of being remedied. Doctor Wilbur, former president of the American Medical Association, and now a member of Mr. Hoover's cabinet, is chairman of a committee which is engaged on a five-year program of fact finding, without being committed to

any theories or policies regarding the future organization of medicine.

Efforts are being made to discover the cost of education and capital investment as well as the incomes of a large number of physicians, the cost as well as the extent of sickness, the extent of hospital services for persons of moderate means, the extent of irregular types of medical practice, and many other types of information needed to form sound judgments.

We have said enough to indicate the importance of the subject. The problem is a very serious one. Is it possible for individual practitioners, working as individuals, really to care for the health of the country? If every person had only one health examination a year this would mean eight hundred a year for each physician, or three a day, not including Sundays and holidays. It is said that only twenty per cent of the people go regularly to a dentist for examination and repair. Obviously, then, valuable as the individual practitioner has proved himself to be, there seems a place also for groups or institutions. As in every other branch of human activity, changes of organization are bound to occur. The relation between independent, individual action and reliance upon group effort must of necessity vary from time to time in the evolution of society.—*Saturday Evening Post*.

THE ANESTHESIA PROBLEM

Chloroform was introduced as a general anesthetic by Simpson, of Edinburgh, in 1848. When I began the practice of medicine, it was the anesthetic in general use. There was a feeling in the medical profession, and it may have been well founded, that if a patient was suffering at the time the operation was performed, so that the pain produced a greater effect on the patient's mind than the fear of the operation, chloroform, if given by the drop method on a little gauze frame, was a safe anesthetic. This was considered especially true of obstetric procedures. It was quite noticeable, however, that when chloroform was given for surgical purposes, the most responsible man gave the anesthetic. I was never quite sure whether this was because of his supposedly greater skill or whether it was to satisfy the relations and friends, if a catastrophe occurred, that everything had been done that could be done.

Chloroform was looked on as a special danger to the heart. On one occasion when I supposed that the anesthetist was using ether, two patients had failure of respiration from which they nearly died, and it was not until I was operating on the second patient that I noticed the odor coming from the anesthetic was that of chloroform and not ether. Through a mistake the bottle had been filled with chloroform instead of ether. In neither of these cases did the heart show serious reduction in volume or rate.

Ether was used first by Long and Morton, and

became the popular anesthetic, but in the early days the A. C. E. mixture was popular. It consisted of one part of alcohol, two parts of chloroform, and three of ether, and was given by the drop method on a little gauze frame.

Eventually ether became the anesthetic of choice, but at times it caused irritation of the bronchial tubes and throat, and usually was followed by nausea and vomiting. For short operations, nitrous oxide was popular, but gave little or no relaxation, and for abdominal work had to be combined with morphine or ether or other anesthetic.

Recent advances in methods of inducing anesthesia have brought in ethylene, a splendid and safe anesthetic, which is much less irritating than ether, but which does not always produce quite so complete relaxation. It can be readily combined with ether, or can be used to follow nitrous oxide, and although it has the disadvantage of being extremely inflammable, in a period of years we have had no accident of any kind from its use.

Acetylene has a small field of usefulness, especially for certain operations on the chest.

In those cases in which breathing is more or less interrupted during the administration of any anesthetic, Lundy has demonstrated the great value of the use of carbon dioxide to stimulate respiration.

Lundy and McCuskey and their co-workers have found the use of combinations of general anesthetics of various types, especially of ethylene with ether or nitrous oxide, in connection with local anesthetics, to be the procedure of choice in a very considerable number of cases.

In all cases, liberal amounts of oxygen have been found advantageous.

The lungs have nothing to do with inducing anesthesia, so far as sleep and relief from pain are concerned, except as an entry way which permits the inhaled anesthetic substance to pass into the blood stream whence it is carried to the central nervous system. In this process irritation may arise in the lungs, possibly causing serious pulmonary complications.

With the new anesthetics, for instance, the sodium salts of the barbituric acids, and others of that type, we at least have achieved a scientific method of injecting the anesthetics intravenously, thereby relieving the lungs and other organs of certain dangers to which we have become so accustomed as almost to have forgotten the reason for their existence.

The Clinic is indebted to members of the staff, first to Dr. Sistrunk and later to Dr. Balfour, for making careful use of sodium iso-amyl ethyl barbituric acid. This agent is not the perfect anesthetic, but in several hundred cases in which it has been used under the direction of Dr. Lundy and his co-workers, we have had no fatalities that could be traced to the anesthetic.

Our experience with sodium iso-amylethyl barbituric acid demonstrates that direct methods of

producing anesthesia may soon be expected, which, in connection with approved methods of inducing regional anesthesia, will relieve the patient of unnecessary dangers to unoffending organs. Certainly, as far as sodium iso-amyl ethyl barbituric acid is concerned, the speed with which the patient drops asleep, and the freedom for some hours after operation from all painful sensation, has led many patients who have had unpleasant experiences with general anesthetics, to plead to be operated on under this newer form.

Regional anesthesia by procaine has a large and growing field of usefulness, and is very efficient and safe. Spinal anesthesia induced by procaine has proved of very great value in operations on those organs which lie below the diaphragm, and this form of anesthesia is the one that should be used in cases of intestinal obstruction, because in this condition, even if the contents of the stomach have been thoroughly removed by tubage previous to giving a general anesthetic, antiperistalsis may occur, regurgitating back into the stomach, esophagus and pharynx a quantity of intestinal secretions which may be aspirated into the lungs, causing fatal broncho-pneumonia, or even drowning on the operating table.

Spinal anesthesia has the very great advantage in cases of probable intestinal obstruction, that if no true mechanical obstruction exists, gas and perhaps intestinal contents will pass by the rectum within fifteen or twenty minutes. Therefore, if gas and intestinal content are not passed after a spinal anesthetic has been administered, mechanical obstruction may be assumed to be present and advantage can be taken of the anesthesia for immediate operation.—W. J. MAYO, M.D., in *Staff Meetings of the Mayo Clinic*.

COST OF MEDICAL CARE

Unquestionably the unfavorable economic position occupied by the average physician of today is due to adherence to the system, brought down from years ago when economic conditions of laboring masses were entirely different, whereby a large proportion of medical work was done on a charity or near-charity basis and unnecessarily so. Today wages are high and there is little or no excuse for idleness. No doubt we have a more satisfied populace in consequence of the ability of all persons to live better in every respect and enjoy some of the luxuries formerly enjoyed only by the rich, yet that does not offer a valid reason for furnishing gratuitous medical and surgical services today for those who formerly were entitled to such consideration. However, the average physician and surgeon still does what he and his predecessors did twenty-five or fifty years ago, and grants favors inconsistently and unwisely to many people amply able to pay for all necessities (of which medical attention is one) and even some luxuries. In reality there would be no howl-

ing about reducing the financial burden of illness, and blaming the cost of medical care entirely upon physicians and demand that they correct the present difficulty, if the members of the medical profession had kept up with the times and insisted that as the economic conditions of people improved and the standards of living increased to a higher level, there should be a corresponding increase in the amount to be paid physicians for such necessary service as medical and surgical attention.

In the final analysis the problem crying for solution has been brought about in a large measure by the inconsiderateness on the part of the members of the medical profession, both individually and collectively, for they not only have shown a willingness to be imposed upon most shamefully by those who should recompense physicians, but medical men have been too free in encouraging poor people as well as those in moderate circumstances to ask for and even demand luxury to which they have not been accustomed nor which can be considered at all necessary for the proper care of the illness. It is admitted that the general cost of medical care may be reduced, but that must come through a constructive change in all of the policies and practices that now have to do with illness and its care, not the least and most important change required being that which requires every person to pay for the care of his illness in proportion to his ability to pay, and also requires that every community shall pay adequately for medical and surgical attention to its indigent. There is absolutely no good logical reason why the medical profession should bear such an enormous economic burden in helping to care for the sick poor or sick indigent, for the members of no other profession and no trade are called upon to make such sacrifices or carry such burdens. We heartily agree with the editorial comment of the *Chicago Tribune* of October 15th which says: "It should be possible through organization and clinics, through insurance, through the development of a system of installment paying, through less expensive hospitalization, and perhaps in other ways, to bring the cost of good medical care within the means of the average man, thereby doing away with much free service. If that result is achieved, then a general reduction of medical charges might follow without a reduction of the income of doctor or hospital. If the poor must be always with us, remember that in this country, at any rate, they are being reduced in numbers. Charity is beautiful to behold, but it is a serious reflection upon our society that we encourage it when it might be replaced by self-respect and independence."

THE Governor of Indiana apparently likes to keep people at work following their usual vocations. He therefore pardons some criminals so that they may resume their criminal careers.

EDITORIAL NOTES

DEAR DOCTOR.

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital.

We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

NEXT year's A. M. A. convention will be held in Detroit, June 23 to 27, inclusive. The date has been selected with consideration for the convenience of members of medical faculties, weather and other factors that have to do with the success or failure of medical conventions. It is a safe bet that the Detroit session will be one of the largest in the history of the A. M. A.

IT must make some of the silly, painted, rouged, cigarette-smoking and cocktail-sipping, bare-legged flappers of the United States green with envy when they read concerning the unstinted praise given the daughter of England's premier, during her visit to this country, for her charming and modest demeanor, her healthy complexion that is utterly devoid of synthetic preparation, and her unadulterated interest in the worthwhile things of life.

MORRIS FISHBEIN, editor of the *Journal of the A. M. A.*, is reported by the daily press to have said to the restaurant keepers in annual session that the time is coming when restaurants will furnish rest rooms wherein patrons can take a nap following their noonday or any other meal, and intimates that such a rest following the partaking of food is a health-saving practice. Ye gods! If Fishbein can take a nap after eating some of the meals furnished by cafes and restaurants he must have a stomach that will digest a box of tacks.

A few months ago we heard a good deal concerning the ill effects of prison service upon Dr. Shumaker, former head of the Anti-Saloon League of Indiana. The prohibitionists were loud in their condemnation of the prison regime and attempted to have the public believe that Dr. Shumaker's subsequent illness had been caused by the penal servitude. Later it developed that Dr. Shumaker had a malignant growth and undoubtedly had it when he was sentenced. Usually an effort to create false sympathy is found out in the long run and acts as a boomerang.

SERIOUS lowering of the blood pressure following spinal anesthesia may be prevented by the use

of ephedrine in the anesthetizing solution. The ephedrine has the effect of raising the blood pressure and thus preventing one of the most dangerous complications of spinal anesthesia. Ephedrine has the same pharmacologic action in raising the blood pressure as epinephrine, but the action of the latter drug is fleeting while ephedrine produces a sustained and prolonged rise in blood pressure, both systolic and diastolic. (Ockerblad Dillon Decourcy, *Journal of Chemotherapy*, April, 1929.)

ONE of our medical friends reminds us that the physicians in any community usually are jealous and suspicious of one another, even though they are not actually blacking each other's eyes or desiring to do so, and he asks the question, "Isn't that true of the workers in any profession or trade when you get inside information on the subject? Even the preachers fight among themselves, and some of them accuse each other of nearly all the crimes in the calendar." However, we still stick to our assertion that physicians, as a rule, exhibit more jealousy and suspicion of each other than is observed in any other class of workers.

ABOUT a year ago we had some uncomplicated things to say concerning denicotized cigarettes. The manufacturers of a well-known product asked us to reconsider, after a faithful trial of denicotized cigarettes, a liberal supply of which were furnished for the purpose. With a view to being absolutely fair, and with a sincere desire to find favor in a cigarette that is supposed to be harmless, we faithfully and religiously tried out the cigarettes supplied. We now reiterate that we can see no particular advantage in denicotized cigarettes, and if the reports of investigations are correct even denicotized tobacco is a delusion.

THE Bulletin of a Better Business Bureau offers the following sage advice: "Frequently a bank will lend money on good securities which for some reason cannot be sold immediately. The willingness of the bank to lend is a good test of the soundness of the security. When the stock salesman offers you stock which he claims will bring you riches, and draws word pictures of spurting oil wells and mines bursting with precious metals, just suggest to him, 'Let's walk down to the bank and make some inquiries.'"

"Your bank will be glad to investigate the merits of the stock—or ask the Better Business Bureau for the facts for you."

BEGINNING with January, 1930, the subscription price of the *Journal of the A. M. A.* will be seven dollars per year, which includes fellowship in the Association for those entitled to the same. This advance in the price should meet with no

objection on the part of any right thinking physician. *The Journal of the A. M. A.* is the largest and best medical journal in the world. The subscription price, even at ten dollars per year, is comparatively far below the subscription prices of other similar periodicals published both in this country and abroad, and not reaching the standard of our own national journal. In other words, we feel that the *Journal of the A. M. A.* alone would be worth ten or even fifteen dollars per year.

MOST everyone can see the value of anything if it is put on a basis of dollars and cents. Accordingly, it sometimes helps people to decide upon health protective measures if they can be made to understand that it means a saving in money by avoiding the expense of idleness, hospitals, drugs and medical and surgical attention. Many parents can appreciate only the economic side of the suggestion to have children vaccinated to prevent smallpox, diphtheria and scarlet fever. Many adults also have to be shown that corrective measures for themselves are in the long run economical from the medical standpoint. Therefore, the economics of health should be stressed in talking to a class of people who place the dollar sign ahead of anything else.

BARBITAL, (trade name Veronal), is not a safe hypnotic, as generally supposed. Unfavorable results often follow the use of the drug. In 1911 to 1913 in England and Wales it occupied seventh place as the cause of deaths from all poisoning. As a result in England it is scheduled as a poison and can be obtained there only by prescription and a proper record kept of its sales. In America it generally has been sold promiscuously to the public. Its demand is stimulated by advertising, and its use facilitated by the public obtaining it without restriction either as to method or amount. That barbitol is a habit-forming drug is a fact well established. Therefore, the drug should be placed in the same category as narcotics and the same restrictions placed on its sale.

AN Indiana physician has a sign which reads as follows: "Ey, E r, Nos and Thr at." Admitting that some of the letters are knocked off of the sign, it should be noted that the defects have existed for more than a year. It reminds us of an old doctor of our boyhood acquaintance who shaved about once a week, wore dilapidated clothes, linen freely stained with tobacco juice, and whose finger nails looked as though they had been dipped in ink. Carelessness in personal appearance usually means carelessness in other things. If a physician has no pride in keeping his professional sign looking all right, his office clean and attractive, and his own dress and personal appearance above hypercritical notice, then it is a safe bet that his carelessness is carried to his professional work.

"WOULD you risk a few dollars for a chance to become a millionaire within six months?" Such is the heading of a letter asking for the investment of money by those who are unwary. Probably a certain number of Indiana physicians will bite at the bait thrown out. We have been told that every "sucker list" contains the names of physicians as the most promising prospective customers. Too bad that every physician cannot afford to have a good business manager. Most physicians could pay such a man liberally out of what is frittered away in foolish investments, and again, on the other side of the ledger would be the adoption of business methods in collecting bills for professional services rendered and in adopting rules for accumulating a competence for the rainy day.

A case of deficiency disease developing during the course of jejunal feeding was reported at one of the meetings of the staff of the Mayo Clinic, by G. E. Eusterman, and in commenting on the subject he said that in our enthusiasm for controlling an obviously functional condition, or for healing a lesion, we are prone to ignore the maintenance of the patient on a diet containing adequate vitamins, minerals or essential amino acids. Diets following gastrectomy or jejunostomy have been well standardized, both as regards adequate caloric intake and content of vitamin so that the weight and health of the patient may be maintained over a long period if necessary. Failure on the part of the patient to cooperate, or inability for one reason or another to utilize the food, may give rise to serious complications if they are left to progress unrecognized.

One or two of the state medical journals are looking for advertising income and are not very particular as to the quality of advertising carried. They are overlooking a bet when they do not secure the advertising of Sanmetto, Konjola, Tongaline, Celerina, Peacock's Bromides, Gude's Pepto-Mangan, Antiphlogistine, Ergoapiol, Sal Hepatica, Prunoids, Cactina Pellets, Hostetter's Bitters, Lydia Pinkham's Vegetable Compound, Tanlac, Swift's Specific, Piso's Consumption Cure, and numerous other proprietary preparations and quack remedies refused endorsement by the Council on Pharmacy and Chemistry of the A. M. A. and favorable recognition by the majority of the medical journals that try to keep their advertising columns as free from criticism as the reading columns. No charge for this suggestion on how to make money!

WITHIN recent months several English physicians have been reporting their results of investigations into the causes of dental caries (*British Medical Journal*). Numerous English authors have found that the carious process in the teeth of children often may be inhibited by

increasing the intake of fat soluble vitamins by the addition of cod liver oil, egg yolks, and extra milk to the diet. This subject is one that also has been investigated in this country, and particularly by some of the men connected with our own Indiana University School of Dentistry. What has been accomplished in children also is being accomplished in adults, and members of the medical profession are applying the knowledge in arresting infectious carious processes in various parts of the body. In consequence cod liver oil, egg yolks and extra milk form a part of the treatment in a variety of conditions showing a deficiency in vitamin D in the diet.

"THIS is a day of specializing, especially with the doctor. Say, for instance, there is something the matter with your right eye. You go to a doctor and he tells you, 'I am sorry, but I am a left eye doctor. I make a specialty of left eyes.' Take the throat business, for instance. A doctor that doctors the upper part of the throat, he doesn't even know where the lower part goes to, and the highest priced one of all of them is another bird that just tells you which doctor to go to. He can't cure even corns or open a boil himself. He is a diagnostician, but he is nothing but a traffic cop to direct ailing people. The old-fashioned doctor didn't pick out a big toe or a left ear to make a life's living on. He picked the whole human frame. No matter what end of you was wrong, he had to try to cure you single-handed. Personally, I have always felt that the best doctor in the world was a veterinarian. He can't ask his patients what's the matter, he's got to just know."—Will Rogers, in *"Ether and Me"*.

A few years ago, when the women and girls began to show a good portion of their legs as a result of the prevailing fashion, one of our leading American surgeons said that the average woman's legs were very homely, and the style would not last. On top of this came the statement attributed to Sir Arbuthnot Lane, a noted English surgeon, that the legs of American women and girls are the prettiest on earth. Now comes a professor of the North Manchester (Indiana) University who tells the W. C. T. U. that there is no leg beautiful enough to be bared to public gaze. He, therefore, recommends that the W. C. T. U. begin a campaign against bare legs and jazz dances just as strenuously as it fights liquor. He was quite emphatic in saying that the leg should be kept covered in public, and it seems to be his argument that the legs are not beautiful. We can hear some murmurs from the gentler sex to the effect: "The old crab! He not only is old but he hasn't even young ideas like most old men!"

THE well-known firm of Parke, Davis and Company is running a series of advertisements in the lay press which is intended to be an educational

campaign to acquaint the public concerning the necessity of employing well-trained physicians and using dependable drugs, pharmaceuticals and biological preparations in the treatment of illness. We believe that the campaign will bring about satisfactory results and prove beneficial to public and medical profession alike. However, we cannot overlook the opportunity to mention the fact that there are many physicians who need prodding concerning the necessity of using dependable agents when treating disease. There are innumerable quacks in the pharmaceutical manufacturing game and they seem to find patrons among physicians who ought to know better. Why patronize such firms when there are firms who can be trusted in every sense, and why use any pharmaceutical specialty that has not the approval of the Council on Pharmacy and Chemistry of the A. M. A.?

THE panic in the stock market last month gave a good many physicians a hard wallop, but we have no sympathy for them as they ought to know better than to deal in margins. One Indianapolis physician is said to have practically bankrupted himself in trying to protect his stock market investments or speculations. From all that we can hear we believe that in every populous city in Indiana there are one or more physicians who have been gambling in stocks and have suffered severe financial losses in consequence. We have no criticism to offer when a physician uses his own money to buy outright stocks that represent a well-managed enterprise and that are paying a fair dividend, but for the man of moderate means, and few physicians are wealthy, to buy stocks on margin is a gambling proposition that more often than otherwise causes financial suicide for the small investor. Furthermore, if any physician who has money to invest will consult his banker before making an investment he will be better off in the long run, and he certainly will not be advised to play any stock market with its possibilities for serious financial loss.

NEW YORK State Department of Health, in one of its recent bulletins, says that eighty-two percent of the total milk supply in the cities of New York State is pasteurized. It then goes on to say that pasteurized milk is the safest milk that can be obtained and even says, "We would like to see even certified milk pasteurized." This last statement will not be swallowed by the advocates of certified milk who always have maintained that their milk, or certified milk, as compared to pasteurized milk, is *clean* milk instead of *cleaned* milk. In the ultimate analysis, it must be admitted that it is very difficult to control the production of milk, and particularly the large quantities of milk required for our cities. Therefore, certified milk, even admitting that it may be the best and we think it is, may be dependent for its purity and

quality upon a rigid inspection and supervision which is hard to find. On the other hand, pasteurization takes care of any slip-up that may occur, though it should be emphasized again and again that dependence upon pasteurization alone is not sufficient. There must be inspection and control of milk production, irrespective of the pasteurization.

OUR teaching institutions have received much well-merited criticism for their tendency to emphasize the specialties to undergraduate students and in the clinics. Above everything else a thorough training in general medicine is essential, whether a physician intends to practice a specialty or not. A good general practitioner has the foundation for a good specialist, and a man who poses as a specialist and does not have a good grounding in general medicine usually is a poor specialist. The plan of permitting a student to major in one of the specialties may seem all right, but it is all wrong if by so doing general medicine is neglected. On the other hand, if some attention is given to all of the specialties, to the neglect of general medicine, then we produce a physician who has a smattering of knowledge of every phase of practice but not much workable knowledge of any of them. No student gets too much of the theory and practice of medicine, physical diagnosis, therapeutics, and obstetrics. If added to this there is a well-rounded course in bacteria and pathology we will trust the student to acquire enough of the special branches to make him a trustworthy physician to turn out to practice on the general public.

OH, my gosh! Look at this from the Associated Press for October 13th. As an evidence of idiotic nonsense it takes the cake! Here it is:

"Rules for the guidance of kissers were issued today by the Kansas board of health in co-operation with the United States Public Health Service.

"Never kiss in crowded places or a poorly ventilated room, the instructions say, but if you must kiss, take a hot mustard foot bath and avoid drafts in case you feel 'all in' afterward.

"Guard against sudden changes in temperature when kissing. Kissing in a coonskin coat one minute and a lighter apparel the next is extremely dangerous.

"Don't kiss any person who has chills and fever.

"At a party, where 'post office' and similar games are played, be sure to gargle frequently."

We have quoted carefully and correctly, and we assume that the health authorities in Kansas are serious about the dangers of kissing. If the rules given out were funny, we would think they came from Will Rogers. Come to think of it, Kansas must have a lot of hot kissers to call forth such restrictive measures. We once knew a couple of corkin' good looking Kansas girls, but that is

another story, though we lived through it without following any restrictive health laws!

AMONG some obstetricians Cesarean section is a last resort, while among others or perhaps we should say general physicians supported by surgeons, Cesarean section is a rather general practice whether indicated or not. Between these two extremes is a happy medium, and as was pointed out at the convention of the American College of Surgeons, held in Chicago in October, definite indications should be determined before resorting to Cesarean section. This means that a careful examination and measurements will indicate whether delivery can be effected through the natural channels or must be effected through an artificial channel produced by Cesarean section. Much should depend not only upon the ability but the honesty of the attending physicians, and perhaps the latter feature deserves more emphasis. Cesarean section is spectacular and commands and receives a large fee in most instances, and in consequence there is a temptation on the part of the grasping physician to recommend Cesarean section, and on the part of the surgeon to follow the line of least resistance, especially when it means the acquisition of a nice fee. There can be no doubt that there is a place for Cesarean section, and when indicated it means a reduction of the mortality rate in childbirth, but the adoption of the procedure should follow indications conscientiously and trustworthily determined.

THE Indiana representatives of the American College of Surgeons, in accordance with plans formerly followed, are asked to nominate from their number those desired to represent them as a state credentials committee, and to send the nominations to the main office in Chicago where the votes are counted and the decision is made. It is presumed that the membership of this committee is a secret matter, though for what reason no one exactly knows, and we can only surmise as to why the representatives in any state are not permitted to hold their own elections and decide among themselves as to whom shall be entrusted the duties of deciding upon the credentials of applicants for fellowship in the College. We have been given to understand that the Indiana members have requested the privilege of conducting their own elections to select those who are to represent them, as they also have signified their desire to have no secrecy in connection with the personnel of the credentials committee. Evidently this request has fallen upon deaf ears at headquarters. Can it be that the open and above-board method would prevent juggling or manipulation? Can it be that any Fellow is too cowardly to let it be known that he is passing judgment upon candidates for admission to the College? We are beginning to think that there are a lot of Fellows

in the American College of Surgeons who are spineless and enjoy having others think for them as well as dictate to them. Oligarchical government may be wise, but usually such power is abused.

Two physicians, one a specialist in nervous and mental disease and the other a well-trained internist, were called in consultation to see a sick woman, poor in purse, who seemed to have little the matter with her excepting loss of weight and extreme nervousness accompanying a physical breakdown. After a prolonged examination the neurologist gave it as his opinion that the patient needed social readjustment which included getting her away from a family of six or seven small children with their interminable noise and commotion of play, into the quiet, soothing atmosphere of a sanitarium. The wise and observant internist, after sizing up the situation, bluntly said, "Oh, hell! Give this woman milk, eggs and beefsteak, with fruit juice as a dessert, and she will get well without any sanitarium or medicine. She is starving herself for the benefit of these kids. Take her away from this home and these kids and she will turn into a maniac. What she needs is proper food. Everything else will take care of itself."

The last advice was followed, and with satisfactory results, which only goes to show that in the practice of medicine it is necessary to take into consideration some of the secret factors that may be at work in helping to produce invalids, not the least of which is deprivation which some mothers exercise to the limit for the sake of their children. It is not always medicine or a surgical operation that fits one's needs. Sometimes it is food, and other times it is sympathy or love that is needed. It is a wise physician who studies his patient's mental processes.

EVERY physician and every surgeon should acquaint himself with the value of radium in the treatment of cancer, and particularly cancer of the female genital organs which is altogether too common an ailment in women. Concerning this latter phase of the subject, the statement of Dr. James Heyman, of Stockholm's Radium Home, an institution to which King Gustavus V. has given \$1,250,000, is significant, and is as follows: "There would seem to be no doubt that by a properly carried out radiological treatment of cancer of the cervix, one should be able to attain at least as good results as by operation, so far as absolute cure is concerned. As the present time the Swedish surgeons are submitting their operable cases to radiological treatment, and since 1920 only a small number of operable cases have been operated upon in Sweden."

Dr. Heyman says that international records of the surgical treatment of 5,806 cases of cancer of the cervix show the percentage of absolute

cures to be 19.1 percent, whereas the records of the radiological treatment of 790 cases at the Swedish Radium Home show the percentage of absolute cures to be 20.6 percent. He also says that he and other authorities at the Radium Home are convinced that in cases of vaginal cancer, radiology should wholly replace surgery. Certainly the medical profession well can heed the comment of Dr. Heyman to the effect that "radiology as a complete or partial substitute for surgery in the treatment of cancer of the female pelvic organs seems to be an established fact."

IN an editorial on medical ethics, in the May number of *Colorado Medicine*, emphasis is placed on the fact that while medicine may be a business yet it is a business ingrained with altruism of the highest kind; a business imbued with the spirit of service to humanity at a sacrifice ranging from a decrease in income to the giving of one's health and life. If medicine be considered a business, then it is a medical business and as such its high ideals and standards must be maintained. There are few people who actually have been deprived of either medical or surgical aid because of lack of funds. Throughout all the ages, physicians have been charitable and possessed of that milk of human kindness which has prompted them to give of their time and talents, irrespective of monetary reward. Thus the editor of *Colorado Medicine* quotes John Hunter who in giving a note to a patient to take to another physician said, "I do not know the bearer's case. He has no money. He is desirous of your opinion. Do all you can for him." Similar notes are written daily by thousands of physicians in the year 1929 and such acts are not advertised either individually or collectively. Summarizing the question of medical ethics, Trachey, in the *River of Life*, was quoted as follows: "No profession is more exposed to the temptation to forget honor, humanity and kindness than the medical profession, and none in which the exploitation of human suffering is easier. Yet there is none in which the temptation is more triumphantly withstood. Let this be remembered by the public, when they feel inclined to sneer at medical etiquette as if it were a code for maintaining selfishness and enrichment. Medical etiquette is the salvation of the patient."

WE dislike to offer objections to any proposition of merit, and especially one that we favor, but we desire to call attention to the unparliamentary and unconstitutional act of the House of Delegates at the Evansville session in its disposition of the proposition to give the State Board of Health representation in the House of Delegates. In the first place such an action as contemplated requires an amendment to the Constitution, and, in the second place, the action of the House of Delegates concerning the representation of the Board of

Health in the House of Delegates was unparliamentary. If you don't believe it, read the minutes of the House of Delegates as printed in the October number of *THE JOURNAL*. The Constitution says that delegates shall be those members who are elected in accordance with the Constitution and By-laws *to represent their respective component societies*, and the by-laws fixes the number of delegates and defines their duties. In order to give the State Board of Health proper representation in the House of Delegates it will be necessary *to amend the Constitution*, and that will require a two-thirds vote of the delegates present at any annual session, *provided* that such amendment shall have been presented in open meeting at the previous annual session and that it shall have been published twice during the year in *THE JOURNAL*. If we are following the Constitution and By-laws then the Board of Health will *not* have representation in our House of Delegates until legal provision has been made for such representation. We are not pointing out this error because we are opposed to the plan offered, but because we feel that as we have a Constitution and By-laws we must abide by the same.

DR. W. J. MAYO, in his address before the American College of Surgeons, at the Chicago session in October, is reported to have said, "Hospitals are the victims of their own super-salesmanship. Half of the population of the United States finds the cost of hospitalization and nursing which it can afford, if at all, only by a great sacrifice. Hospital super-salesmanship places the patient in surroundings which are above his means and have no value in the relief of conditions from which he is suffering. My own experience has been that a patient in a well-planned ward, giving a moderate degree of privacy, will make a quicker recovery than in a private room with two nurses. Many hospitals show too much salesmanship and too little humanity. Hospitals must adopt better business methods, whine less and think more. When the hospital is built it should be with the common man in mind and have fewer frills and show rooms."

Dr. Mayo has touched upon a subject which has received comment from us in previous numbers of *THE JOURNAL* when discussing some of the features connected with the high cost of medical care. Hospitalization is not necessary for a large number of people who now are hospital inmates, and the service is too expensive, not alone because the hospitals make it so but because patients demand many frills to which they are not accustomed and which are superfluous and unnecessary. The question of having high-priced nursing is another phase worth considering, for it is a recognized fact that the highly trained nurse is not necessary for the average case, as was presented so ably by Dr. Charles H. Mayo a few years

ago when he urged the creation of a class of nurses who have not been required to expend the time and money in becoming registered nurses, and prefer to be known as practical nurses. The highly trained technical nurse, or so-called registered nurse, always will have a place in our work, but she is not required in the average case nor can the average case afford her services.

IN a paper on the composition of cigarette smoke, which appeared in the *Journal of the A. M. A.*, October 12, 1929, Emil Bogen says that by simply choosing the brand of cigarettes to be used the amount of nicotine to which the smoker is exposed can be materially increased or reduced. Thus domestic cigarettes contain the highest concentration of nicotine, averaging about 2.5 percent, whereas the West Indian brands contain the lowest nicotine content of any tobacco tested, generally under 1 percent. The oriental cigarettes have from 1.25 to 1.50 percent of nicotine content, and the blends of mixtures of oriental tobacco, which constitute the majority of the popular brands, vary from 1.5 to 2.5 percent of nicotine. Concerning the so-called denicotinized cigarettes the author says that they contain more nicotine than do some of the West Indian varieties and little less than the ordinary oriental brand. It is pointed out that the nicotine is not the only injurious agent to be found in cigarette smoke. Local irritation from the aldehydes formed during the combustion, from ammonia produced from other nitrogenous substances during the course of the smoking, and from the heat of the smoke itself, as well as the irritating tarry substances comprising the so-called tobacco oil, should not be disregarded as well as many other minor causes of injurious effects. Concerning the ill effects of smoking the author says that while smoking after mealtime may relieve nervous strain, increase digestive secretions and allay appetite in a harmless manner, the use of the cigarette before meals is apt to impair appetite and interfere with nervous stimuli to the digestive processes, resulting in the production of various distressing symptoms. Under ordinary conditions many prominent observers have failed to note any deleterious effects whatever from the use of cigarettes. Certain conditions, however, have been so frequently associated with the practice of smoking that the casual connection seems indisputable. Cardiac arrhythmias, shortness of breath, thromboangiitis obliterans, nicotine amblyopia, and chronic inflammations of the upper respiratory passages are familiar examples. Different brands of cigarettes differ widely in the proportions of their constituents, and differences in the manner of smoking may modify greatly the composition of the smoke they yield.

IN a Western city we heard the Mayo Clinic lambasted from a variety of angles, but more particularly because of its advertising, by a patently

peevish surgeon who probably had become conscious of a change of affiliation on the part of some of his former patients. There isn't a question of doubt concerning the popularity of the Mayo Clinic, which is by far the best advertised clinic in the world both from the professional as well as lay standpoint. The success of the clinic is based upon the personality, genius and ability of the founders and their associates and the high quality of service rendered. From an economic standpoint the success has been due to good business management. The reason that hundreds of other clinics in the United States have not succeeded as well as the Mayo Clinic can be attributed solely and alone to a lack of one or more of the qualifications necessary for such an enviable reputation and economic success as that attained by the Mayo Clinic. Every clinic and every individual practitioner of medicine advertises himself best by the quality of service he renders and the confidence he inspires in the minds of the public. Personality counts for much, but it never has maintained success for any individual unless also accompanied by real ability. Blatant advertising and extravagant self praise never gave lasting success to any professional man. On the other hand, the successful professional man oftentimes is the victim of advertising not of his seeking nor his approval. This comes through misguided friends, or as an expression of appreciation from those who have been aided in recovery of health and happiness. Not infrequently the objectionable publicity comes through lay and professional publications that see in the history of the success of individuals or institutions a bit of feature news that is considered appropriate for publication and lay consumption. We have contended that in emphasizing and upholding the ethics and proprieties of the practice of medicine the medical profession should discipline and penalize the big fellows as much as the little fellows. However, in analyzing everything pertaining to objectionable publicity on the part of medical men, we are disposed to believe that the little fellows are guilty of more and greater infractions of the rules of ethics and propriety than many of the big fellows who really do not need nor do they covet sensational publicity.

Mose: "How fas' can you all go in dat new car?"

Rastus: "Ah could do two miles a minute 'cep-tin' for one thing."

Mose: "What's dat, boy?"

Rastus: "Only jes' 'cause de distance is too long foh de shortness of de time."

Dietitian: "Yes, a few lettuce leaves without oil, and a glass of orange juice. There, madam, that completes your daily diet."

Mrs. Overweight: "Thank you so much, doctor, but do I take this before or after meals?"

SECRETARIES DEPARTMENT

I hope every secretary attended the Evansville meeting. It was a success even if the weather was warm.

Did you read the resolution adopted by the council to help pay your expenses to the next secretaries' conference? The resolution and action on same is as follows: Resolution, State Med. Journal, October, 1929 issue, page 459. "Whereas, the secretaries of the county societies have formed a permanent secretaries' organization and,

"Whereas, the work of the secretaries is for the benefit of the county society and the profession as a whole, and attendance at special meetings is an obligation and,

"Whereas, the secretaries act without salary and are compelled to pay their own expenses attending these special meetings,

"Therefore, be it resolved, that their actual expenses be paid out of the general fund of the Indiana State Medical Association for attendance at the Mid-Winter Meeting, in a sum not to exceed twenty-five dollars (\$25.00) each, and,

"Be it further resolved, that said payment be made only upon presentation of receipted bills for transportation, maintenance, etc."

The Council moved to instruct the budget committee that the railroad fare of secretaries be paid to the meeting which is to be held at Chicago, the spring of 1930, the entire amount so expended not to exceed \$1,000. This would not include the expenses of councilors or officers of the Association.

So you see your job is being appreciated by the doctors. If you work real hard maybe they will give you a copy of "The Specialist" by Chic Sale. Who knows?

The secretaries' meeting will be held in Chicago the last of April or first week in May. The exact date will be announced as soon as possible. Begin to make your plans now so we can have a big day in Chicago. Also bring your councilor along. He needs to know all about secretaries.

I see in the papers several of the "big guns" are telling the public that the doctors will have to be careful. They are charging too much. They are not taking care of the needy sick, and that state medicine is coming in the back door very soon. There might be a few who see the almighty dollar before anything else, but I believe the majority are taking care of the needy sick all the time. But they don't brag about it. You know public opinion is a terrible thing to deal with. So you had better see what you can do to mould public opinion in your community. If you don't, maybe you will be looking for a job with some company or on the payroll of some social organization who is taking care of the sick.

I read in the paper the Chicago Medical Society is going to build several hospitals with one hundred doctors on the staff of each one. They are

going to beat state medicine. I wonder if the profits from these institutions will be divided among the doctors. How will these doctors make a living for themselves and families. The American Medical Association should print all this dope in detail in their journal. Maybe we could learn something about finance and the care of the sick.

In the last issue of THE JOURNAL, the Medico-Legal department tells us something about finance, "How to collect a bill from an estate." Please read it.

If Mr. Sloan, claiming to represent the "Standard Adjusting Arm" of New York City, calls on you, call the Better Business Bureau, Inc., at Indianapolis. If the agents of the U. S. National Adjustment Company, of South Chicago, call on you, *be sure to read the contracts offered.*

On January 7, 1930, the present "King of Suckers" dies and a new one is born. This delivery is a tedious and painstaking affair. Every doctor who wants to and can come is welcome to this event. The location of the delivery room will be announced in December. This event is sponsored by the Vigo County Medical Society. Maybe you can get up a stunt of this kind for your Society. Good fellowship again.

Do you know Dr. W. R. Davidson, of Evansville, was elected secretary of the State Board of Medical Registration and Examination to succeed Dr. E. M. Shanklin?

Did you read the editorial on page 442 of the October issue of THE JOURNAL about "Lay Control of Medical Practice"? If not, you should do so.

Did you read "Auto Care vs. Human Care"—in the October 19th issue of the A. M. A.?

See you next week.

A. M. MITCHELL, M.D.,
Terre Haute.

MEDICO-LEGAL DEPARTMENT

ALBERT STUMP

ATTORNEY FOR INDIANA STATE MEDICAL
ASSOCIATION

Question. Must a physician who is served a subpoena attend as a witness outside of the county of his residence? If so, is there any limit on the distance which he can be compelled to go as a witness?

Answer. There is no provision, in express terms, in any of the statutes fixing a limit within the state to the distance that a witness may be compelled to go to attend the trial of a case. Burns Revised Statutes 1926, Section 542, requires that witnesses residing in the county where the court is held, shall be compelled to attend in obedience to the subpoena without payment or tender of fees being first made.

Section 543 provides that a witness shall not be obliged to attend before a court or judge out of the county where he resides unless his legal fees

for traveling to and from the court, and one day's attendance, are paid or tendered before or at the time of the service of the subpoena.

Section 465, in regard to depositions, permits the use of depositions in trials where the witness does not reside in the county, or in a county adjoining the one in which the trial is to be held.

The Appellate Court, in *Alexander vs. Harrison*, 2 Ind. App. 47, construed these sections of the statutes together and held that, although the provisions of the statute requiring fees and mileage to be tendered a witness before he could be compelled to leave his own county, were not expressly limited to the adjoining county, yet that the several provisions of the statutes on the subject taken together made it clear that the attendance of a witness could not be enforced except in the county in which he lives or is served with process, or in an adjoining county. That decision of the Appellate Court has not been overruled and the case has been cited with approval by both the Supreme and Appellate Courts, although in those citations the precise question here mentioned was not involved.

Upon the foregoing authority, a physician can be compelled to attend as a witness in the county of his residence and in adjoining counties; but he cannot be compelled to go beyond an adjoining county. He may, however, be compelled to give his deposition to be read in evidence in the trial of cases beyond the adjoining counties.

Question. What witness fees are provided for by law? May a physician lawfully refuse to testify as an expert witness in a cause unless he is paid a professional fee for such service?

Answer. Burns Annotated Indiana Statutes 1926, Section 546 provides: "Witness fees in the circuit, superior and criminal courts shall be as follows, to-wit:

"Every witness attending the circuit, superior and criminal courts, in his own county, per day, one dollar and twenty-five cents.

"Every witness attending the circuit, superior and criminal courts, from another county, per day, one dollar and twenty-five cents.

"For each mile necessarily traveled in going and returning from court, from his residence, not to be computed beyond the limits of adjoining county, five cents."

Section 558, Burns 1926, reads as follows: "A witness who is an expert in any art, science, trade, profession or mystery may be compelled to appear and testify to an opinion, as such expert, in relation to any matter, whenever such opinion is material evidence relevant to an issue on trial before a court or jury, without payment or tender of compensation other than the per diem and mileage allowed by law to witnesses, under the same rules and regulations by which he can be compelled to appear and testify to his knowledge of facts relevant to the same issue."

This section of the statute is of doubtful constitutionality. In *Buchman vs. State*, and *Dills vs. State*, both in 59 Ind. pages 1 to 25, by a divided court it was held, in the absence of a statute, that a physician could not be required to testify as to a professional opinion without the compensation of a professional fee. The court, in those cases, held that the professional knowledge of a physician should be regarded in the light of property. The opinion refers to the physician's medical knowledge as his capital stock. It reaches the conclusion that to require him to give his professional opinion without receiving professional compensation would be contrary to Section 21 of the Bill of Rights of the Indiana State Constitution. That section reads as follows: "No man's particular service shall be demanded without just compensation. No man's property shall be taken without just compensation; nor, except in the case of the State, without such compensation first assessed and tendered."

At the time these two cases were before the court the statute quoted was not in force. But if the reasoning of the majority opinion in these cases is to be followed in a judicial inquiry into the validity of the statute, the statute must be held invalid.

Question. If a summons is not served on one personally by reading it to him, but a copy of it is left at his home, should the person summoned appear in court as directed in the summons?

Answer. The serving of a summons is the first step in bringing into court one who is being sued. Service may be had either by reading the summons to the person being summoned, or by leaving a copy at his last known residence.

It is impossible, however, for one to advise wisely in a matter of this kind without a definite knowledge of the details that are involved. One receiving a summons served in any way should take that summons at once to his attorney and be governed by the advice of one on the ground and able to familiarize himself at first hand with all the facts.

In conducting this department I am not assuming to act through the columns of *THE JOURNAL* as the attorney in specific cases, but only to give that general information in regard to the legal problems with which the medical profession may be confronted, which might be of value to the profession as a whole. This department, I hope, may be regarded by physicians in the same light as the layman in medicine would regard *Hygeia*—as the source of valuable information in regard to matters of health, but not as something to take the place of the physician. So, although legal questions of all kinds are welcome, this department is not intended to take the place of the attorney.

DEATH NOTES

R. C. PEARE, M.D., of Rockville, died October 10th, aged sixty-seven years. Dr. Peare graduated from the Kentucky School of Medicine, Louisville, 1891.

J. P. FRANZ, M.D., of Indianapolis, died October 18th, aged sixty-nine years. Dr. Franz was a graduate of the American Medical College of Indianapolis, in 1897.

HARRY G. GAYLORD, M.D., of Indianapolis, died October 13th, following a long illness. Dr. Gaylord graduated from the Miami Medical College, Cincinnati, in 1888.

H. P. LONG, M.D., of Dillsboro, died October 10th, aged fifty-seven years. Dr. Long graduated from the University of Louisville School of Medicine in 1897. He was a member of the Dearborn County Medical Society, the Indiana State Medical Association and the American Medical Association.

LOUIS M. ROWE, M.D., of Indianapolis, died October 1st, aged sixty-eight years. Dr. Rowe graduated from the Medical College of Indiana, Indianapolis, in 1882. He was a member of the Indianapolis Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

JOHN T. FREELAND, M.D., of Bedford, died in an Indianapolis hospital October 7th. Dr. Freeland was sixty-nine years of age. He was a member of the Lawrence County Medical Society, the Indiana State Medical Association and the American Medical Association. He was a graduate of the Kentucky School of Medicine, Louisville, in 1886.

M. F. BALDWIN, M.D., of Marion, died October 14th, aged seventy-two years. Death resulted from a cerebral hemorrhage. Dr. Baldwin was a member of the Grant County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Eclectic Medical College, of Cincinnati, Ohio, in 1884.

SYLVANUS R. CLARK, M.D., of Petersburg, died October 5th as the result of an accident when his automobile was hit by a train. Dr. Clark was fifty-four years of age. He was a graduate of the Medical College of Ohio, Cincinnati, in 1890. He was a member of the Pike County Medical Society, the Indiana State Medical Association and the American Medical Association.

BERNARD PULSKAMP, M.D., of Rome City, died October 6th at a hospital in Fort Wayne. Dr. Pulkamp suffered from heart trouble. He was sixty-one years of age. He had been connected with the Kneipp Sanitarium at Rome City for twenty-six years. He graduated from the Georgetown University School of Medicine, Washington, D. C., in 1890 and was a member of the Noble County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

NEWS NOTES AND PERSONALS

ANNOUNCEMENT has been made of the marriage of Mrs. Susan Blocksom and Dr. Julian C. Carson, of Frankfort.

DR. HARRY E. MOCK, of Chicago, addressed the Tippecanoe County Medical Society at its regular monthly meeting, October 8th.

THE Woman's Auxiliary to the Indianapolis Medical Society held a dinner dance and bridge party, November 13th, at the Lincoln Hotel.

THE forty-second semi-annual meeting of the Eleventh Indiana Councilor District Medical Association was held in Wabash, October 17th.

DR. HARVEY L. MURDOCK, of Fort Wayne, presented an address on "Auricular Fibrillation" before the Muncie Academy of Medicine, October 29th.

THE Allen County Medical Society held a meeting in the Wayne Pharmacal Building, Fort Wayne, October 29th. Dr. Doster Buckner discussed the subject of physio-therapy.

THE Muncie Academy of Medicine held a meeting at the Hotel Roberts, October 8th. Dr. Ernest Rupel, of Indianapolis, talked about "Urinary Obstruction," illustrating his talk with lantern slides.

MRS. T. C. STEELE, of Brown County, widow of the well-known Indiana artist, addressed the members of the Vigo County Woman's Auxiliary at the home of Dr. and Mrs. J. H. Weinstein, of Terre Haute.

OPHTHALMOLOGISTS from European and American centers were in attendance at the dedication of the Wilmer Ophthalmological Institute, at Johns Hopkins University School of Medicine, Baltimore, October 15th and 16th.

THE October meeting of the Madison County Medical Society and its auxiliary was held in

Anderson, October 15th, with Dr. S. J. Stottlemeyer in charge. Dr. A. M. Mendenhall, of Indianapolis, addressed the meeting.

ANNOUNCEMENT has been made of the appointment of Dr. Ada E. Schweitzer, director of the child hygiene division of the Indiana State Board of Health, as a member of the board of directors of the American Health Association. Dr. Schweitzer's appointment is for four years, ending in 1933.

THE Fifth International Congress of Physiotherapy will be held at Liege, September 4th to 8th, 1930. The organization of the Congress is progressing rapidly and attention is drawn to the real union which will take place in Liege on the occasion of the International Exposition and the Centenary of Independence.

THE Tippecanoe County Medical Society will have Dr. A. E. Sterne, of Indianapolis, as its guest November 14th. His subject will be "Basic Training and Environment and Phases Peculiar to U. S. A." The meeting will be open to the public and will be held at the Home Economics Building at Purdue University.

KOKOMO was selected as the place for the 1930 meeting of the Eleventh Councilor District Medical Association, which probably will hold its meeting next May. The Reed cup, which Wabash County has held for several years, was given to Miami County for having the largest attendance at the meeting held in Wabash recently.

THE Seventh District Medical Society held a meeting at the Home Lawn Sanitarium, Martinsville, October 29th. Papers were presented by Drs. D. O. Kearby (president), L. Walter Portteus, J. S. McBride, Leon Gray, and W. D. Little. The honor guest was Dr. Morris Fishbein, of Chicago, who spoke on "Fads and Quackery in Medicine."

A FELLOWSHIP in pharmaceutical research, which carries with it a stipend of \$1,000 and free tuition, has been established by the Philadelphia College of Pharmacy and Science. Applications are being received from candidates for the year 1930-1931. Further information may be obtained from the college at Forty-third street, Woodland and Kingessing Avenues, Philadelphia.

AUTOMOBILE accidents caused the death of 752 persons in seventy-eight large cities of the United States in the four weeks ending October 5th, according to the United States Department of Commerce. The automobile death rate per hundred thousand of population for the year ending Octo-

ber 5th was 24.9, as against a rate of 22.3 for the year ending October 6, 1928. This was an increase of twelve percent in these cities in one year.

MEDICAL authorities from several states appeared on the program of the conference of bacteriologists and pathologists of Michigan and neighboring states held at the Indiana University School of Medicine, in Indianapolis, October 18th. Dr. Jacques J. Bronfenbrenner, of Washington University, presented a paper on "The Nature of Bacteriophage" during the meeting. Dr. Thurman B. Rice was chairman of the Indianapolis committee on arrangements.

THE first seminar of the present school year was held in the auditorium of the Indiana University School of Medicine, October 25th. Cases were presented by Drs. Edward Billings, Joseph Clevenger, G. Burch Mehlin, George Garceau, Lawrence Robrock, and Earl Wiseman. Dr. Thurman B. Rice spoke on "Bacteriophage," Dr. B. B. Turner talked about some of the newer knowledge of the chemistry and physics of the active process in nerve and muscle, and Dr. F. F. Hutchins presented some medical observations made during a recent trip.

THE Union District Medical Association held its 124th semi-annual meeting at Connersville, October 31. Dr. Clarence R. Strickland, of Indianapolis, presented a paper on "Blood Vessel Pathology." Dr. William N. Wishard, of Indianapolis presented a paper on "The Development of Prostatic Surgery and Its Present Status", and Dr. Cleon Nafe, of Indianapolis, talked about "Acute Appendicitis." This society includes members from Fayette, Franklin, Henry, Rush, Union and Wayne counties in Indiana, and Butler and Preble counties in Ohio.

DR. WILLIAM J. MOENKAUS talked about "Kidney Function and Its Relation to Blood Chemistry" at the November 5th meeting of the Indianapolis Medical Society. At the November 12th meeting, Dr. Harold Hatch discussed "The Treatment of Bronchial Asthma," and Dr. Kenneth Craft "The Treatment of Hay-fever." On November 19th, Dr. Elmer Funkhouser will speak on "Cardiac Arrhythmia" and Dr. Henry Beckman will have as his subject "The First Stage of Labor." At the November 26th meeting Dr. James H. Stygall will present a paper on "Diagnosis and Treatment of Lung Abscess" and Dr. John Carmack will talk about "Mastoiditis with Gastro-intestinal Disturbance in Infants." The December 3rd meeting will be a dinner meeting.

In addition to the articles already enumerated the following have been accepted by the Council

on Pharmacy and Chemistry of the American Medical Association:

Abbott Laboratories:

Metaphen 2500.

Hollister-Stier Laboratories:

Bacillus Acidophilus Culture-Hollister-Stier.

Acne Vaccine.

Pertussis Bacillus Vaccine.

Typhoid-Paratyphoid Prophylactic.

Staphylococcic Vaccine.

Mead Johnson & Co.:

Sobee.

Sandoz Chemical Works, Inc.:

Calcium Gluconate-Sandoz.

E. R. Squibb & Sons:

Diphtheria Toxoid-Squibb, 30 cc. vial.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

September 6, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; C. P. Emerson, M.D., and Thomas Hendricks, executive secretary.

Minutes of the meeting held August 30, read and approved.

The following two articles upon the annual session were prepared for release:

General news story for Saturday, September 14, 1929.

Special story for Sunday, September 15, 1929.

The radio release—"When the Ambulance Siren Sounds"—was approved for broadcast Saturday, September 7.

Advertisement upon cancer cure that appeared in an Indianapolis paper referred to the Bureau of Publicity. The Bureau took steps to protest against such advertisement.

Proposition concerning an advertising campaign presented at the last meeting of the Bureau of Publicity by an Indianapolis advertising firm was referred to the American Medical Association. No answer has been received as yet from the American Medical Association.

The Bureau authorized the construction of a bulletin board at Evansville for a display of some of the releases of the Bureau the past year.

Proof of the annual report of the Bureau received by chairman of the Bureau, corrected and returned to the editor of THE JOURNAL.

The following bills were approved for payment:

Central Press Clipping Service.....	\$ 5.00
The Bailey Office Supply.....	15.00

\$20.00

There being no further business, the meeting was adjourned. The above minutes were approved in each separate part and as a whole September 13, 1929.

BUREAU OF PUBLICITY

October 4, 1929.

Meeting called to order at 4:00 p. m.

Present: Wm. N. Wishard, M. D., Chairman; J. A. MacDonald, M. D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held September 6 read and approved.

The release, "High Blood Pressure", read and approved for publication Saturday, October 12, 1929.

The radio release, "High Blood Pressure", was approved for broadcast Saturday, October 5.

The following report of medical meeting was received:
September 3—Rotary Club, Anderson, Indiana, "The Conquest of Diseases."

The following request was received for speaker: October 16—Tri-County Medical Society, North Vernon, Ind. Speaker obtained.

Letter was received from the secretary of the American Medical Association in regard to advertising proposition proposed by an Indianapolis agency in which he confirmed the opinion already entertained by the Bureau of Publicity that the favorable effect medical articles intended for the public would have would be lost if those articles appeared on the same page and in direct connection with commercial advertisements. In other words the Bureau of Publicity feels that its articles should not be used by an advertising agency to get advertising contracts for the newspapers. Part of the letter from the secretary of the American Medical Association follows:

"From all that I have been able to see and hear, I am of the opinion that the work of the publicity committee of the Indiana State Medical Association has been splendidly done and that its contributions to the press of the state have been well received. I should be inclined to advise strongly against linking the work of that committee with any enterprise of any sort having a commercialistic tinge. In my opinion the influence of the publicity committee will be stronger if its program is continued on its present basis."

Letter was received from the Better Business Bureau of Indianapolis saying that the Better Business Bureau of Rochester, New York, desires copies of radio talks that have been given in the past year over station WFBM at Indianapolis. The Bureau instructed the secretary to supply these articles to the Better Business Bureau.

Request was received from a physician from out of the state who attended the Indiana State Medical Association's annual meeting, for an outline of the work that is being done by the Publicity Bureau and the headquarters office of the Indiana State Medical Association. The Bureau instructed the secretary to supply such an outline.

Request also received for information in regard to publicity work from an officer of the medical society of Tacoma, Washington. The secretary was instructed to send the desired information.

The secretary reported the action of the House of Delegates upon the annual report of the Publicity Committee which was sent to the Reference Committee on Publicity by the chairman of the House of Delegates. The reference committee reported as follows upon this report:

"Your committee most heartily commends the report of the standing committee on Publicity and recommends its adoption."

The House of Delegates unanimously accepted the report of the Reference Committee.

Resolution in regard to the appointment of a historian was adopted by the House of Delegates and was to come before the next meeting of the Bureau.

Letter received from the director of physical rehabilitation of the Marion National Sanatorium, National Military Home, Indiana, asking for information in regard to ringworm. The secretary was instructed to refer this letter to a dermatologist.

The secretary reported that the cancer advertisement which appeared in one of the Indianapolis papers was referred to the Better Business Bureau and that the Better Business Bureau reported that it had called upon the newspaper which ran the advertisement and the newspaper expressed regret and said that it would not publish such an advertisement again.

The following bills were approved for payment:
Central Press Clipping Service.....\$ 8.28
A. B. Dick Company..... 2.50
A. B. Dick Company..... 4.00
\$14.78

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 11, 1929.

BUREAU OF PUBLICITY

October 15, 1929.

Meeting called to order at 3:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; C. P. Emerson, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held October 4th read and approved.

The release, "Radium Jugs the Bunk," read and approved for publication Saturday, October 19th.

Radio release, "Radium Jugs the Bunk," was reported as being broadcast Saturday, October 12th.

The following request was received for speaker:

Oct. 30—Grant County Medical Society, Marion, Ind. Surgical subject. Speaker to be obtained.

The appointment of an historian in accordance with the resolution adopted by the House of Delegates at Evansville was considered by the Bureau. Final decision was deferred until further consideration, investigation and study can be given this matter.

The Bureau was notified that the Executive Committee appointed the Publicity Committee to act in an advisory capacity with the Woman's Auxiliary. The following excerpt from the minutes of the Executive Committee meeting of Tuesday, October 8, 1929, was brought to the attention of the Bureau:

"By action of the House of Delegates at the Evansville meeting provision was made for the creation of an advisory committee to act with the woman's Auxiliary to the Indiana State Medical Association. No provision, however, was made concerning the make-up of this committee. The Executive Committee, acting in its administrative capacity at those times when the House of Delegates is not in session, named the Bureau of Publicity to act as the advisory committee from the State Association for the Woman's Auxiliary."

The Bureau of Publicity instructed the secretary to place this matter before the mid-winter meeting of the Council for confirmation.

The following letter was received from the former president of the American Medical Association of Vienna:

"Will you please send me data regarding bills proposed, as well as bills passed by your State Legislature during the past ten years, regarding State or Socialized Medicine?"

"There is a tendency in the United States to express dissatisfaction over our present system of administering medicine to the public, and these dissatisfactions are frequently expressed in the form of bills proposed before our State Legislature, which are designed to change our system."

"I am collecting data on this trend of public opinion for one of our national medical journals and I should value highly your cooperation not only by sending me the information requested, but any additional information that you may have which bears on the subject."

The answer of the Bureau of Publicity follows:

"Although we know of no laws in Indiana that are drawn up with the intent of giving state or socialized medical service, a feeling exists in various parts of the state that some of the laws have been misconstrued until they have resulted in what some term a form of state medicine. For instance, the present secretary of the

State Board of Health is administering the present state law in regard to the state laboratory so that free laboratory service is obtainable in the state by persons regardless of their ability to pay. This has been a source of criticism from many physicians in Indiana. If you care for details along this line we can give you further information concerning what the Bureau of Publicity considers is a perversion of the intent of the law in its administration."

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 18, 1929.

BUREAU OF PUBLICITY

October 18, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held October 15th read and approved.

The release, "Hoosierland's Health Harvest," read and approved for publication Saturday, October 26th.

Radio release, October 19th, "Hoosierland's Health Harvest."

The following request for speaker was received:

Oct. 30—Grant County Medical Society, Marion, Ind. Speaker to be obtained to talk on accident or orthopedic surgery.

The following report of medical meeting was received:

Oct. 16—Tri-county Medical Society, North Vernon, Ind. "Certain Types of Heart Disease."

Request received from the Marion County Tuberculosis Society for use of the regular weekly period of the Bureau of Publicity over Station WFBM for November 30th, December 7th, 14th and 21st. The secretary was instructed to get further information from the secretary of the Marion County Tuberculosis Society in regard to these broadcasts before they were approved by the Bureau.

The following bill was approved for payment:

A. B. Dick Company.....\$2.50

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole October 25, 1929.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES

MONTHLY REPORT, OCTOBER, 1929

The morbidity reports of the principal communicable diseases from the health officers of the state during the month show a marked increase over the previous month, except typhoid fever. Scarlet fever, diphtheria, smallpox, measles and typhoid fever are known as the principal communicable diseases. Telegraphic reports of these diseases are made weekly to the U. S. Public Health Service, Washington, D. C. The name and number of diseases reported from the urban and rural population are as follows (urban includes cities of 2,500 and over, rural all under 2,500 population):

Disease	Total	Urban	Rural
Tuberculosis	134	83	51
Chickenpox	124	103	21
Measles	36	34	2
Scarlet Fever	240	103	137
Smallpox	86	43	43
Typhoid Fever	32	9	23
Whooping Cough	55	47	8
Diphtheria	133	98	35
Influenza	19	0	19
Pneumonia	4	1	3
Mumps	15	9	6
Poliomyelitis	1	1	0
C. S. Meningitis	1	0	1

Trachoma	2	0	2
Malaria	1	0	1

Scarlet fever shows a marked increase: 132 cases the previous month; 396 cases the preceding year. Scarlet fever is a cold weather disease. The peak is reached in the early spring, usually in March. Just why this is, no one seems to know. It has often been said that the disease is scarcely known in the tropics.

Diphtheria increased eighty-five cases last month. October of the previous year 226 cases were reported. The estimated expectancy for October is 384 cases. The estimated expectancy is based upon the experience of the last seven years, including epidemics. In 1923, the annual report shows that 4,088 cases were reported and in 1929, the report will show 1,495 cases. At the end of the next period of seven years, perhaps, there will be no cases to report. Let us hope so.

Smallpox made an advance of nearly one hundred percent. Forty-four cases last month, only twenty cases reported same date last year. The estimated expectancy was sixty-one cases. Smallpox is an exanthemata and is contracted by close contact. More cases occur in the winter season because the people are housed up as in homes, schools, shows, street cars, buses and churches. This is true of all the infectious diseases.

Measles shows a hundred percent increase over the preceding month, when eighteen cases were reported. October is not measles time. It is an early spring disease. The peak months are March and April. During the last seven years in March and April 17,277 and 19,215 cases were reported, respectively. Then, perhaps, only about twenty-five percent of the cases were reported.

Typhoid fever shows a decline—forty-four cases last month. The previous year, corresponding date, 103 cases. The estimated expectancy was 149 cases. Fewer cases of the disease (32 cases) were reported this month than in October for the last ten years. This is near the winter average.

During the month the director spoke with film showings to the men of the Indiana Bell Telephone Company's plant at Muncie, Marion, Bloomington, Indianapolis, Kokomo, South Bend, New Albany and Evansville, on the menace of the two principal venereal diseases, gonorrhea and syphilis, and how they may be prevented, controlled and cured. These meetings were sponsored by J. W. Hammon, superintendent of plant, and W. L. Hurst, safety director. Eleven hundred men out of approximately 1,400 in the plant attended these meetings.

H. W. MCKANE, M.D.,
Collaborating Epidemiologist,
Indiana State Board of Health.

ELEVENTH COUNCILOR DISTRICT

Minutes of the 42nd Semi-annual Meeting of the Eleventh Indiana Councilor District Medical Association

Held in Wabash, October 17, 1929.

Meeting called to order at 1:50 p. m. by President, Dr. Nettie B. Powell.

Minutes of previous meeting read and adopted.

By motion of Doctor Reed, of Logansport, the secretary was instructed to write a letter of condolence to the family of the late Dr. F. W. Baldwin, of Marion. Copy on file.

On invitation by Doctor Hutts, of Kokomo, it was decided that we hold our next meeting in Kokomo.

Councilor Perry reported that all counties were in good going condition.

President Powell introduced Dr. A. M. Snell, of the Mayo Clinic, who gave a most timely and practical discussion on the subject, "Some Recent Advances in Endocrinology." Some questions brought out further discussion of the subject by Doctor Snell. A rising vote of thanks was given Doctor Snell.

Doctor Eckhart, of Marion, then was introduced by President Powell.

Doctor Eckhart's paper was well received and brought out considerable general discussion. Those participating were Doctors Marshall, Griswold, Reed, A. T. Davis, Miller and Eckhart.

President Powell introduced Doctor Egan, of Logansport, who read a splendid paper on the subject, "Some Observations on the Relation Between Nasal and Systemic Diseases." General discussion by Doctors Bannon, Perry, Brubaker, Holmes and Egan.

Miami County having the largest percentage of attendance (fifty percent), the Doctor Reed Cup was presented to them by the secretary of the Wabash County Medical Society.

We were most highly and pleasantly entertained in the evening by Charles Milton Newcomb, of Cleveland, Ohio, who spoke on the subject, "The Psychology of Laughter."

NETTIE B. POWELL, M.D.,
President.

O. G. BRUBAKER, M.D.,
Secretary.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society met October 9, 1929, at the Oliver Hotel, in honor of Dr. John B. Berteling.

Dinner was served at 6:30 to sixty members and guests.

Dr. Charles Stoltz served as a witty and clever toastmaster.

Dr. Miles F. Porter, of Fort Wayne, and Dr. William F. King, of Indianapolis, secretary of the Indiana State Board of Health, old friends of Doctor Berteling's, gave short talks on their associations with him. Other old friends, Fathers Kavanaugh and Wengeer, Doctors Hill, Montgomery and Bosenbury, each adding his story or reminiscence.

Doctor Berteling in replying read from his presidential address given before the Indiana State Medical Association in 1903, wherein a number of reforms had been suggested by him at that time and which he had lived to see accomplished.

Doctor Berteling brought out that he had held every position of honor which the state or county could bestow but did not yet feel that his work was at an end, and proposed to carry on in all those ideals for the good of humanity for which he had always striven.

Respectfully,

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer.

CORRESPONDENCE

CORRECTION

October 31, 1929.

Editor, THE JOURNAL:

In the minutes of the meeting of the House of Delegates of the Indiana State Medical Association at Evansville the report of my remarks as chairman of the Bureau of Publicity does not convey the impression intended where I am quoted as saying, "We are not promoting the work of periodic health examinations but we are promoting the education of the public." What I intended to convey was the fact that the work of the Bureau of Publicity is broadly educational and that periodic health examinations constitute but one phase of the work, but a very important phase.

Yours sincerely,

WM. N. WISHARD, M.D.,
Chairman Bureau of Publicity.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Further information concerning these books will be supplied on request.

Books received since September, 1929:

AN INTRODUCTION TO THE STUDY OF HUMAN ANATOMY. By Robert James Terry, A.B., M.D., Professor of Anatomy in Washington University. 346 pages. Cloth. Price \$3.50. The Macmillan Company, 60 Fifth Avenue, New York City, 1929.

CLINICAL MEDICINE FOR NURSES. By Paul H. Ringier, A.B., M.D., formerly chief of medical service of the Asheville Mission Hospital, and on staff of Biltmore Hospital, Biltmore, N. C. Third revised edition. 330 pages. Cloth. Price \$3.00. F. A. Davis Company, Philadelphia, 1929.

DISEASES OF THE BLOOD. By Paul W. Clough, M.D., Associate in Clinical Medicine, Johns Hopkins University. 310 pages. Flexible binding. Price \$2.50 (pocket size). Harper & Brothers, Publishers, New York and London, 1929.

TULAREMIA. History, Pathology, Diagnosis and Treatment. By Walter M. Simpson, M.S., M.D., F.A.C.P., Director of the Diagnostic Laboratories, Miami Valley Hospital, Dayton, Ohio. Foreword by Edward Francis, Surgeon, U. S. Public Health Service. 162 pages with 53 text illustrations and 2 colored plates. Cloth. Price \$5.00. Paul B. Hoeber, Inc., New York, 1929.

THE NUTRITION OF HEALTHY AND SICK INFANTS AND CHILDREN. By E. Nobel, Professor of the University and First Assistant of the Children's Hospital of the University of Vienna; C. Pirquet, late professor of the University and Director of the Children's Hospital; and R. Wagner, Associate Professor and Second Assistant of the Children's Hospital. Authorized Translation by Benjamin M. Gasul, B.S., M.D., Consulting Pediatricist at the Municipal Tuberculosis Sanitarium of Chicago; formerly Resident Physician in the Children's Department of the Cook County Hospital, etc. Second revised edition, 243 pages, with 78 illustrations (including charts) and 6 tables. Cloth. Price \$3.50. The F. A. Davis Company, Publishers, Philadelphia, 1929.

INTERNS HANDBOOK. A Guide to Rational Drug Therapy, Clinical Procedures and Diets. By members of the faculty of the College of Medicine, Syracuse University, under the direction of M. S. Dooley, A.B., M.D., Chairman, Publication Committee. Cloth. J. B. Lippincott Company, Philadelphia and London, 1929.

DISEASES OF THE CHEST AND THE PRINCIPLES OF PHYSICAL DIAGNOSIS. By George W. Norris, M.D., Professor of Clinical Medicine in the University of Pennsylvania, and Henry R. M. Landis, M.D., Professor of Clinical Medicine, University of Pennsylvania, Director of Clinical and Sociological Departments of the Henry Phipps Institute of the University of Pennsylvania, with a chapter on the Transmission of Sounds Through the Chest, by Charles M. Montgomery, M.D., and a chapter on Electrocardiograph in Heart Disease, by Edward Krumbhaar, Ph.D., M.D. Fourth edition, revised. 954 pages with 478 illustrations. Cloth. Price \$10.00. W. B. Saunders Company, Philadelphia and London, 1929.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

OINTMENT EPHEDRINE COMPOUND.—An ointment containing ephedrine-Lilly (New and Nonofficial Remedies, 1929, p. 166), 1 Gm.; menthol, 0.65 Gm.; camphor, 0.65 Gm.; oil of thyme, 0.0375 Gm.; hydrous wool fat, 5

Gm.; liquid petrolatum 24 Gm.; white petrolatum, to make 100 Gm. Eli Lilly & Co., Indianapolis.

LILLY'S EPHEDRINE JELLY.—It is composed of ephedrine sulphate-Lilly (New and Nonofficial Remedies, 1929, p. 169), 1 Gm.; glycerin, 15 Gm.; tragacanth, 1.5 Gm.; eucalyptol, 0.1 Gm.; oil of wintergreen, 0.005 Gm.; oil of dwarf pine needles, 0.005 Gm.; water to make 100 Gm. Eli Lilly & Co., Indianapolis.

VIOFORM-CIBA.-IODOCHLORHYDROXYQUINOLON.—A substitution compound of anachlor-ortho-hydroxy-quinoline resulting from the introduction of one atom of iodine. Vioform-Ciba is used as an odorless substitute for iodoform. It is used as a dusting powder for application to wounds, ulcers, burns, exudative skin eruptions, etc. Ciba Co., Inc., New York.

I-X BARIUM MEAL.—A mixture of barium sulphate U. S. P., 85 per cent; native aluminum silicate, 10 per cent; malted milk (malt extract-milk powder), 5 per cent; with a trace of saccharin. The preparation is used for roentgen-ray examinations, administered orally or by rectum. Dick X-Ray Co., St. Louis.

MEAD'S POWDERED LACTIC ACID MILK NONCURDLING, No. 1 WITH DEXTRI-MALTOSE.—A modified milk product prepared by adding lactic acid, U.S.P., and a maltose-dextrin preparation to whole milk, heating, drying, and powdering. It is proposed for use in the feeding of infants when it is desired to prescribe an acidulated milk with a certain amount of added carbohydrate. Mead Johnson & Co., Evansville, Ind. (*Jour. A. M. A.*, September 7, 1929, p. 769.)

SOBEE.—A mixture of soybean flour 67.5 per cent and barley flour 9.5 per cent, to which has been added olive oil 19.0 per cent, sodium chloride 1.3 per cent, and calcium carbonate 2.7 per cent. Sobee is used as a substitute in the diet of infants who are sensitive to the proteins of milk. Mead Johnson & Co., Evansville, Ind. (*Jour. A. M. A.*, September 28, 1929, p. 989.)

PROPAGANDA FOR REFORM

ERGOT PREPARATIONS OMITTED FROM N. N. R.: An Explanation.—In the *Journal of the American Medical Association*, May 4, 1929, there was published a report by the Council on Pharmacy and Chemistry on certain preparations of ergot which were intended for hypodermic administration. This report stated that the preparations had been omitted from New and Nonofficial Remedies because they were essentially watery extracts of ergot and therefore contained little or none of the specific alkaloids of the drug; because, with one exception they were not assayed by any method which showed their alkaloid content; and that an examination had shown that they were practically devoid of the specific alkaloids. Inasmuch as there seems to be in certain quarters some misunderstanding of the action the Council on Pharmacy and Chemistry points out that the reasons for omitting these preparations are those stated in its report, and the Council emphasizes that no evidence was found to indicate that in any case there was adulteration, or that improper ergot had been used in the manufacture of these products. Nor was any preparation found to be unduly toxic. (*Journal A. M. A.*, September 7, 1929, p. 769.)

RADIOACTIVE WATERS AND SOLUTIONS.—Not many years have passed since the Council on Pharmacy and Chemistry, basing its decision on the then available evidence, admitted to New and Nonofficial Remedies various preparations containing in solution radium or radium emanation (radon), and various devices for causing radium emanation to pass into drinking water. The evidence was not extremely well controlled or profuse in amount, but there seemed to be a demand by physicians for such preparations and the Council considered it worth while to set up at least minimum standards of radium content or radium activity. Actually, innumerable preparations were on the market which contained insufficient radium to have any demonstrable effects. Now the Council has issued the following statement:

From an examination of the available evidence, it appears that the value of the internal use of radium solutions or of water containing radon in chronic arthritis, gout, neuritis and high blood pressure is not demonstrated by controlled clinical evidence; that in spite of many years of trial, acceptable evidence has not become available and until such evidence does become available the Council has decided not to accept generators for the production of water charged with radon or radium solutions intended for intravenous use. The announcement by the Council disposes of the claims made for all sorts of solutions and for the devices to be used in preparation of such solutions, whether they contain considerable amounts of radium or but insignificant traces. (*Journal A. M. A.*, September 7, 1929, p. 771.)

THE AMERICAN CROSS CHEMICAL CO.—The American Cross Chemical Co. is one of the trade names used by W. H. Paxton, of Birmingham, Alabama, in the sale of his nostrums. Other names used are Pax American Cross Chemical Co., and American Cross Bearers. W. H. Paxton is a colored man who for some years has been engaged in selling "Pax 2 New Life Savers Compound Syrup of Fruit Juices" and "Pax 3-in-1 Healing Antiseptic and Liniment." In a prosecution by the government it was brought out that the so-called New Life Saver Tonic was said to consist of a mixture of pineapple syrup, vanilla extract, extract of blackberries, glycerine and fluid extract of juniper berries. Paxton's "Healing Antiseptic and Liniment" was said to contain glycerine, fluid extract of pokeroor, oil of lavender flowers, oil of juniper berries, oil of sassafras and fluid extract of blackberry. Paxton claimed that his nostrum would cure cancer, gonorrhea and many other specific diseases and ailments. The Post Office authorities have issued a fraud order against the American Cross Chemical Co., Inc.; Pax American Cross Chemical Co., Inc.; American Cross Bearers; W. H. Paxton, President, and Mrs. Cassie Bell Paxton, Secretary-Treasurer, thus denying the use of the mails for the furtherance of the sale of the nostrum. (*Journal A. M. A.*, September 7, 1929, p. 788.)

JOSEPH ASKINS, QUACK.—Joseph Askins, of Lima, Ohio, has been quacking it for several years. He has sent letters to ministers, secretaries of chambers of commerce, chairman of state senates, and others, declaring that he (Askins) has a cure for cancer, tuberculosis, Bright's disease, diabetes and other conditions. He has done business chiefly under his own name, but also under the trade name "J. A. Company." Also he appears to have used the somewhat imposing trade style, "Electro-Scientific Research Company," to get ministers of the gospel to furnish him with a "sucker list". As a result of an investigation, the Solicitor of the Post Office Department recommended to the Postmaster General that a fraud order against the Askins business be issued. The Solicitor stated that the business being conducted by Askins, under the name J. A. Company, is that of selling through the mails so-called Askins Vitality Batteries or Heart Batteries which are to be worn on the person and which are found to be wholly inert electrically. A phase of the business advertised by Askins under his personal name, involves the sale of a device called "Vitalizer". This appears not much unlike a medium-sized flashlight, except that at one end, instead of a bulb or light, there is a wire cord about a yard in length, on the end of which is a small screw which is attached to another device. In the larger part of the Vitalizer there is placed a small dry cell of one and a half volts capacity. To use the Vitalizer the pencil-like device is inserted into the rectum and the current turned on. The Postmaster-General issued a fraud order against the J. A. Company under which name the "Heart Batteries" business was conducted. It is to be regretted that because the evidence was insufficient to prove that the Vitalizer was sold through the mails, a fraud order was not issued against the name of Askins. (*Journal A. M. A.*, September 14, 1929, p. 865.)

THE NICOTINE CONTENT OF TOBACCO.—About a year ago, the Connecticut Agricultural Experiment Station published a report which showed that the claim that certain tobaccos has been "denicotinized" was largely without foundation, for it was found that there were, among ordinary tobaccos, brands in which the nicotine was either not in excess or was actually lower than that present in the processed tobaccos, sold under the implied claim that they were practically free from nicotine. The Station has now issued a further report giving the results of the analyses of tobaccos of both the processed and unprocessed types. Altogether, eleven brands of unprocessed pipe tobacco have been analyzed and found to have an average total nicotine content of 2.04 per cent; four brands of so-called denicotinized pipe tobacco gave an average total nicotine content of 1.3 per cent; ten brands of ordinary unprocessed cigars gave an average total nicotine content of 1.51 per cent, while seven brands of processed, or so-called denicotinized, cigars gave an average total nicotine content of 0.95 per cent. In the cigaret field forty-six analyses were made of ordinary unprocessed products, giving an average total nicotine content of 1.77 per cent, as compared with 1.09 as to the total nicotine content of twelve so-called denicotinized brands. From this work it can be seen that while some of the so-called denicotinized products contains less nicotine than the ordinary unprocessed brands of the same class, they still contain material quantities of nicotine. The main difficulty in determining whether or not the claims made by manufacturers of so-called denicotinized tobacco products are reasonable lies in the failure to know the amount of nicotine in the various tobaccos before they were processed. However, this work permits the tobacco user to arrive at some worth-while conclusions on this point. It should not be forgotten, also, that nicotine is probably not the only harmful element in tobacco smoke, and that Dixon has reached the conclusion that moist tobacco produces much more serious effects than dry tobacco, and has even suggested that the water content of tobacco might be a more harmful factor to the smoker than the nicotine content of the tobacco, and that the conditions of the tobacco and the form in which it is smoked are probably more important factors in determining the amount of nicotine that the smoker gets than is the actual nicotine present in the original tobacco. (*Journal A. M. A.*, September 21, 1929, p. 938.)

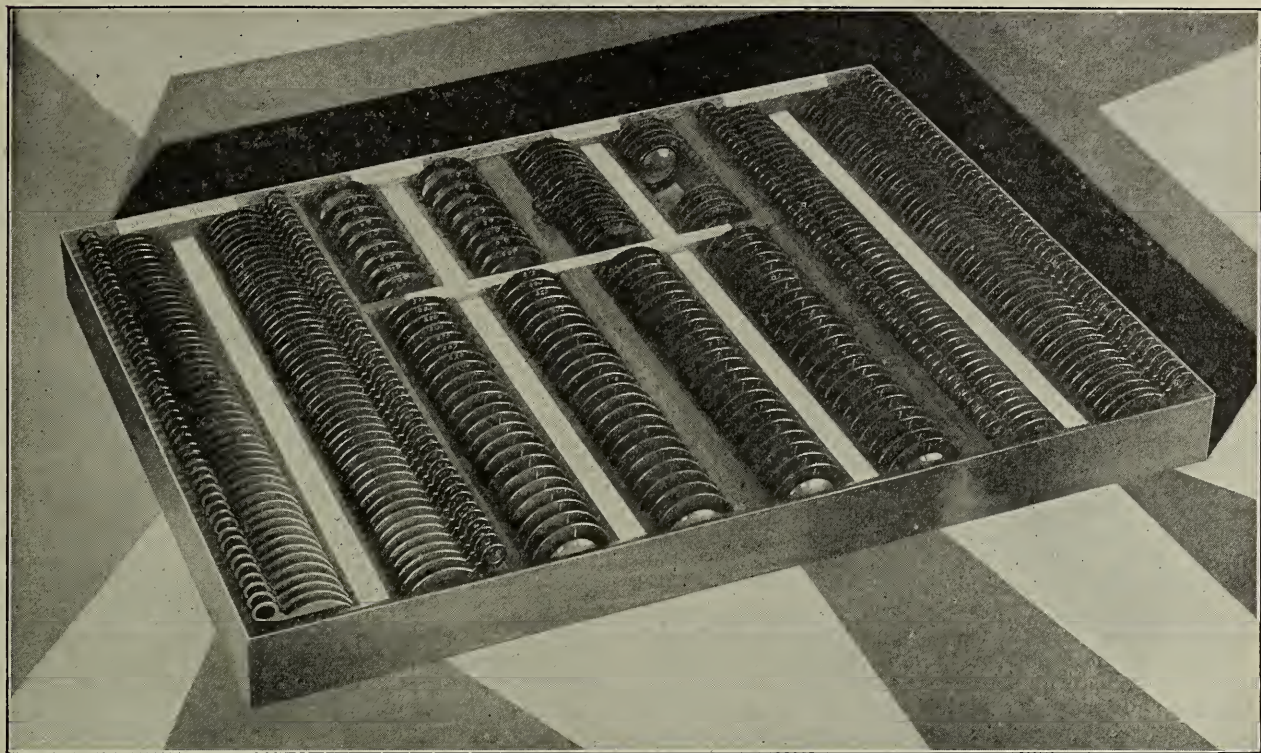
THE U. S. PHARMACOPEIAL CONVENTION.—The Council on Pharmacy and Chemistry has issued a report calling attention to the call for the appointment of delegates to the United States Pharmacopeial Convention. The Council urges all the organizations which are entitled to delegates to select persons who are noted for high ideals, for breadth of vision, for sane understanding, and, for sound judgment, as well as for technical knowledge, men who are fitted by temperament and training to collaborate, to help by deed and by counsel to keep the United States Pharmacopeia a work in which American medicine and American pharmacy may feel a just pride; a work that fairly reflects modern medical and pharmaceutical science; a work that is conservative of the best of the past, and progressive, constructive, sensitive to the best of the new. The Council discusses the character of the work of revision and the men required for this work. It points out that the selection of drugs to be admitted to the Pharmacopeia must be determined primarily by their therapeutic usefulness; that these are medical matters, and therefore fall within the technical province of the physicians of the revision committee; and that the definite recognition of this principle in the last revision contributed notably to its success and should be continued. The Pharmacopeia should be a working manual of the present era and not an antiquarian museum. New drugs should be admitted freely when their therapeutic usefulness appears established, and some old drugs which have fallen into neglect or disrepute should be omitted. The policies of the present revision have earned for the Phar-

macopeia "the sanction of the medical community and of the public" and may safely be continued. (*Journal A. M. A.*, September 28, 1929, p. 989.)

THE UNITED STATES PHARMACOPEIA.—The United States Pharmacopeia is published by authority of the United States Pharmacopeial Convention. This body meets once every ten years, and its chief function is the selection of the Committee of Revision of the United States Pharmacopeia. To this committee is assigned the task of issuing the revised edition of the book. The next Pharmacopeial Convention has been called for May 13, 1930, at which time the delegates appointed by the constituent bodies will meet and inaugurate the preparation of the eleventh revision of the Pharmacopeia. At the time when instruction in medical schools in subjects related to therapy and drugs was woefully deficient, and when conditions made necessary the establishment by the American Medical Association of its Council on Pharmacy and Chemistry, the Pharmacopeia promised to degenerate into a mere book of standards for drug control officers. In 1916, when the ninth revision of the Pharmacopeia made its appearance it was pointed out that it was a book of standards for drugs but not a book of standard remedies. Largely as a result of the renewed interest in scientific drug therapy which was created by the Council on Pharmacy and Chemistry, there was so much interest taken in the following revision of the Pharmacopeia that, at the convention held in 1920, the medical members of the revision committee were in effect delegated to decide which of the drugs in the ninth revision were to be retained in the tenth and which were to be omitted as being of insufficient usefulness, and as a result the tenth revision is a book with which physicians and pharmacists may justly be satisfied. In order that the next revision may correctly reflect the advances in drug therapy, the medical and other bodies entitled to send delegates to the coming convention should give serious consideration to the appeal of the Council on Pharmacy and Chemistry that competent delegates be sent to this convention. (*Journal A. M. A.*, September 28, 1929, p. 990.)

MORE MISBRANDED NOSTRUMS.—The following products have been the subject of prosecution by the Food, Drug and Insecticide Administration of the United States Department of Agriculture which enforces the Federal Food and Drugs Act: Odol (The Odol Corporation), consisting essentially of alcohol, 78 per cent, salol and water, flavored with volatile oils, including peppermint. Sorbefacin (The Foster-Dack Company) consisting essentially of zinc oxide with traces of menthol and thymol in a petrolatum and fatty acid base. Clear-Tone (The J. T. Kennedy Company) containing 42 per cent of alcohol, with calomel and alum and small amounts of potassium nitrate, camphor and tannin, together with water. Giles Magic Lotion and Blood Purifier (The Giles Remedy Company) consisting essentially of camphor and ether in linseed oil. Creomulsion (Creomulsion Company) consisting essentially of creosote, menthol, a small amount of alkaloidal material, sugar, gum, water and a small percentage of alcohol. Lax-Krax (The Cubbison Cracker Company) a bran cracker containing senna. Lee's Creo-Lyptus (Creo-Lyptus Company, Inc.) consisting essentially of ammonium chloride, chloroform, plant extractives, traces of volatile oils (with a possible trace of creosote) sugar, alcohol and water. Acid Tablets (The Arlington Chemical Company) claimed to contain bacillus acidophilus the strength of which fell below the professed standard. (*Journal A. M. A.*, September 28, 1929, p. 1007.)

MUM-NONSPI-ODORONO.—In 1914, Mum was found to contain essentially zinc oxide and benzoic acid in a fatty base. In 1915, it was reported to contain salicylic acid, zinc oxide, glycerin, water, tallow-like fat and traces of essential oils. Later the A. M. A. Chemical Laboratory found the product to contain 3 per cent benzoic acid and not salicylic acid. According to information (Continued on adv. page xx)

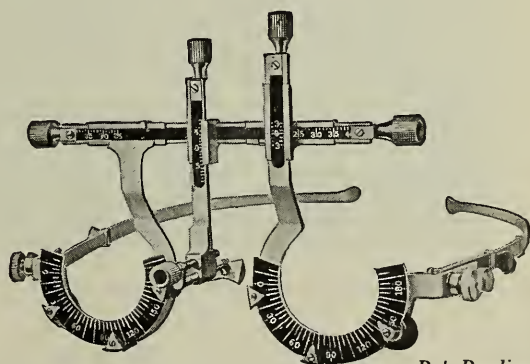


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TRUTH ABOUT MEDICINES

(Continued from page 506)

tion available, the base of Nonspi is aluminum chloride dissolved in water containing some potassium and iron. In 1915, Odorono was found by the A. M. A. Chemical Laboratory to contain a 33 per cent solution of hydrous aluminum chloride. (*Journal A. M. A.*, September 28, 1929, p. 1012.)

ABSTRACTS

PROPER USE OF PHENOBARBITAL IN TREATMENT OF EPILEPSIES

The technic of the successful administration of phenobarbital is discussed by Roy R. Grinker, Chicago (*Journal A. M. A.*, Oct. 19, 1929). He says: definite dosages cannot arbitrarily be stated for any one patient since the "convulsive threshold" must vary enormously. Each patient is an individual therapeutic problem and must be treated by the method of trial and error over a period of time in order that the proper dosage should be given at the proper time. If the patient has only nocturnal seizures, the only dose necessary may be administered after the evening meal and except in the very young this should be started with one and one-half grains. Similarly, when convulsions have regularly occurred only in the forenoon, the phenobarbital should be given after breakfast or, if necessary, also in the evening. When the spells have occurred only in the afternoon, the drug should be first given only at noon. This dosage may be successful in an individual having occasional spells at these definite times. When the spells occur more frequently and se-

verely, the use of one dose of $1\frac{1}{2}$ grains may not be enough. The phenobarbital should be first increased to 2 or $2\frac{1}{2}$ grains (0.13 or 0.16 Gm.) at the single administration. Then if the "convulsive threshold" is still low and spells break through, the drug should be given twice daily and, if necessary, after each meal, beginning with three-fourths grain (0.05 Gm.) With necessity the dosage should be increased gradually by one-fourth grain (0.016 Gm.) jumps to 2, $2\frac{1}{2}$ or even 3 grains (0.13, 0.16 or 0.2 Gm.) three times daily. When convulsions occur irregularly at any time, phenobarbital should be started in three-fourths grain (0.05 Gm.) doses three times daily and increased with necessity to as high as 3 grains (0.2 Gm.) three times daily. For frequent appearing convulsions, for example several times weekly, the initial dosage should be $1\frac{1}{2}$ grains (0.1 Gm.) three times daily. This applies to children as well as to adults. The drug should be prescribed in powder form put up in capsules unless the dosage is exactly the amount of the commercially prepared tablets. Breaking the tablets into halves and fourths is rarely satisfactorily done by the patient. When other drugs are used simultaneously, such as cascara, they may be included in the capsules. Certain obstinate cases may not respond well to the powdered phenobarbital alone. Then extract of belladonna in one-tenth to one-fifth grain (0.006 to 0.12 Gm.) amounts or more may be experimentally included in the capsules. At times it may be necessary to try the soluble phenobarbital sodium when high doses of the powder have not had the desired effect. Best of all in the intractable case is the combination of phenobarbital sodium and sodium bromide in solution. For the most resistant convulsions, from 15 to 20 grains (1 to 1.3 Gm.) of bromide and $1\frac{1}{2}$ to $2\frac{1}{2}$ grains (0.1 to 0.16 Gm.) of phenobarbital three times a day may be necessary. The sodium phenobarbital deteriorates in solution so that only a quantity lasting three weeks should be prescribed at a time.



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ORIGINAL ARTICLES

SOME UNSOLVED PROBLEMS OF OPHTHALMOLOGY AND OTOLARYNGOLOGY*

J. A. STUCKY, M.D.,
LEXINGTON, KY.

Seven years ago I had the privilege and honor of appearing before this society to present a paper on "Trachoma or Folliculosis Among School Children," two diseases which were considerably in the "spotlight" of the ophthalmological world at that time, and especially in this country.

I shall now give you the results of my further observations and results concerning other diseases of the eye, ear, nose and throat.

In this age when the "exact sciences" are in the ascendancy, where the traditions of clear thinking are so powerful, one hesitates to bring forward any proposition not capable of verification by experiment, or any practice not founded on fully thought-out scientific concept. Still more naturally may one hesitate when his subject is taken from the confused mass of actuality, where the isolation of facts is difficult, where exact observation is almost impossible, where coherent science is still a distant ideal, but where concrete problems of great importance are pressing for solution¹.

If I have dared to bring before you my clinical observations and conclusions, which have not yet been verified by the laboratory and other scientific studies, it is because the presentation of crude clinical facts to a scientific society may hasten the application of scientific methods to one immediate social problem. That problem is the unknown etiology of the destructive diseases of the eye known as trachoma, glaucoma, choroiditis and cataract, as well as the naso-pharyngeal, paranasal and suppurative diseases of the ear and also dental caries.

What can ophthalmology and otolaryngology do to develop the physical and mental potentialities of the rising generation? The present uni-

versal ferment of social ideas is not without its meaning.

It has taken a century to convince the masses of the importance of personal hygiene, environment and oral cleanliness, but now that they are appreciating the necessity of putting the house in order, it is our duty to fit the man to live in the house. The inherited or generational degeneration does not destroy the potency of the race to recover the ground temporarily lost.

The natural tendency of social reformers is to look for a remedy before they find the cause of the disease. The only way to disprove alleged facts is to produce other equivalent facts obtained by more exact methods.

Many of my clinical observations have been verified by laboratory experiments and by fully thought-out scientific concept, but this confused mass of human actuality exists and the isolation of clinical facts is difficult because the exact observations are almost impossible and yet at this moment concrete problems of greatest importance are demanding solution.

It must be remembered that my clinical observations began with an isolated, neglected people, so remote from medical centers and transportation that their deplorably diseased conditions had to be met with ways and means available or be carried to them by piecemeal at long intervals. What were the ways and means available? All I had to work with was what they had—sodium bicarbonate, chloride of sodium and Epsom salts; the three S's—salt, soda and salts. I had to do something with these three and I did. What was needed for ninety-nine percent of them? First, nutrition; second, sunlight. They shut themselves up in little cabins with only the door for ventilation. Third, water. Streams running right by their doors, but they did not use them for hygienic purposes. What did I have to overcome? Disbelief and doubt on their part and to convince them of the necessity of using properly the things which they had. They had plenty of fruit and vegetables, but did not know how to prepare them. They did not prepare them. I had a job to overcome their belief that sickness, disease and death was a dispensation of Providence either sent by God, or the work of witches and the devil.

*Presented before the Section on Ophthalmology and Otolaryngology at the annual session of the Indiana State Medical Association, held in Evansville, September, 1929.

Their changed conditions as a result of the medical and surgical treatment carried to them in their isolation, their being taught by precept and example, by nurses, school teachers and social workers, hygienic living and improved nutrition, has brought about a rapid decrease in destructive diseases of the eye, ear, nose and throat as well as mouth conditions, and all this justifies the enthusiasm with which I present this topic for your consideration.

My contention is that we can aid the research worker by an intensive clinical study of our cases, but this knowledge must be gleaned from observation of more than the angle of symptoms and shadows, pain and pyrexia. These are symptoms which only too frequently when relieved are disappointing to both patient and physician.

Before considering either of the diseases referred to let us consider the conditions of the people in their surroundings and the means available for treatment: 1. Undernourished. 2. Living in unsanitary and unhygienic homes. 3. Improperly prepared and unbalanced diets. 4. Women and children, pale, anæmic and with deplorable mouth and throat conditions. It is with those having this undermined physical condition that we found the destructive disease of trachoma, in addition to a large number of other degenerative diseases.

At first these diseases had to be arrested, by surgery, and second by dietary and hygienic conditions to insure permanent relief obtained by the surgery. Oral cleanliness, dentistry, vaccines for the prevention of typhoid fever, diphtheria and smallpox, removal of tonsils and adenoids with what home treatment could be given for the relief of paranasal sinus and middle ear infections. Notwithstanding the dentistry, vaccines and inoculations, the major part of the problem had to be met with means at hand, because none of these patients could be given satisfactory treatment in their homes, and only those who had destructive mastoid or other intra-sinus suppuration could be taken over the long, rough and rugged mountain trails to the railroad and carried to the hospitals many miles away.

The thing most needed was a restoration of the calcium balance, because clinically they had, in the majority of instances, a hypocalcemia and one of the rarest articles of diet was milk. Without this they were without butter and much of their food was devitalized in the process of cooking, by boiling or frying, in addition to which they were consuming large quantities of super refined sugars and flours with cheap grade canned goods, candies and cakes.

With the addition of milk to their diet, concentrated vitamin "A", as found in cod liver oil, concentrated "B" as found in dried brewers' yeast, and fresh fruits and green vegetables in abundance the change which has taken place has been nothing short of spectacular. It was among these

people that we found sixty percent of our crippled children and premature aged.

The method of attack, in the presence of the large amount of suppurative conditions, was (1) drainage and ventilation and the use of antiseptic solutions to destroy micro-organisms, (2) rendering the part of the body involved unsuitable for growth of micro-organisms by use of alkalis, both locally and internally, the combination of both methods giving better clinical results than either one singly.

It has been proved in many laboratories that a normal diet insures all processes of growth and maintenance to be normal, in experimental animals; that a deficiency in one or more of these essential elements interrupts growth or metabolism or both; that an excess of any of these elements may be harmful in either or both ways: (a) by causing formation of toxic substances, (b) by displacing other essentials in the diet.

Assuming the diagnosis of the diseases referred to was correct and presented all classical symptoms, the border line cases or those of questionable diagnosis are not considered in this list, and yet all received the same hygienic and dietetic advice.

It is a source of gratification to know that well-known scientists, who, after many years of laboratory research, have carefully thought this question through, at the last meeting of the A. M. A.² in Portland, Oregon, agreed that inadequate diets predispose to, if they do not actually cause, degenerative diseases. To this statement McCollum agrees, and while many of these clinical observations cannot be translated into scientific language and the laboratory is just beginning to confirm the clinical observations of years ago, there are still those who believe that what has not been confirmed by laboratory findings should be viewed with suspicion.

My plea is that since many degenerative diseases can be produced in the laboratory by insufficient diets and relieved by correction of that insufficiency, nutrition should be the major consideration of our treatment, the event, and not an incident.

It may be that some will think my presentation of this topic so lacking in qualitative measurements that it cannot be expressed in scientific language, yet the clinical facts and end results remain.

There is probably no field of human thought in which sentiment and prejudice take the place of sound judgment and logical thinking as completely as in dietetics.

It has been shown that those on diets high in calories, low in vitamins and predominantly of acid ash-forming foods, are most likely to have degenerative diseases. When this diet is changed for one low in calories, high in vitamins, high in residue and predominantly of alkaline, ash-forming food, there follows objective changes in the

skin and sclerotics, with functional changes in the circulatory, nervous and gastro-intestinal systems.

These changes indicate that inadequate diet predisposes to it if it does not actually cause much degenerative disease.

Fuchs, in his prize essay published in 1884, and Boldt, in a small volume on "Trachoma," as well as many other writers, in discussing culture, cleanliness and occupation, says, "The alimentation of the people becomes better and more rational as their prosperity increases with a consequence that the number of scrofulas diminishes considerably, also those cases of chronic irido-choroiditis which are especially common among ill-nourished elderly people."

Boldt says, "the people who are particularly subject to trachoma are the young, weak, delicate people with pale faces, flabby muscles and narrow chests, of the lower classes, because they are often deprived of good food, suitable clothing and proper dwellings, while the better classes of the community usually escape."

Baeck goes so far as to say that "people who are not predisposed do not take trachoma even if they are infected, while the predisposed take it in spite of all attempts to avoid infection."

It is rather interesting to note that although poor food is mentioned as a contributing cause and there is much mention of prophylaxis in the way of practical cleanliness, the chapter on treatment avoids mention of even such an essential matter as good food for cure. Boldt gives a full bibliography up to the time 1904, while McCollum brings the same information up to 1915, his argument leading to the curing of everything by operative surgery and destroying the bacteria as carried on by the series of clinics directed by him in Egypt.

I am now convinced that trachoma is primarily the result of a nutritional disaster (deficiency disease) transmitted from parents to children, or acquired, and when it becomes chronic a surgical disease which like all malignancies must be removed carefully and thoroughly. I do not advocate tarsectomy or stripping the cartilage of its conjunctiva. I believe glaucoma is the result of toxemia and a nutritional disaster, the majority of the patients having a sub-acute acidosis and usually a decided increase in the blood pressure. Free purgation and rapidly alkalinizing the body maintaining this alkalinity by adherence to a basic diet with the use of myotics is usually all that is necessary. Occasionally I have to relieve the tension temporarily by emptying the anterior chamber, but rarely do I have to resort to iridectomy and only when other measures fail.

Fifteen years ago I saw many cases of congenital cataract. Some of these cases were seen with me by Dr. Harlan of Baltimore and Dr. F. Parke Lewis, of Buffalo, and in nearly every case other children or members of the family had more

or less opacity of the lens. Early surgery in these cases was disappointing, but after correct feeding the child (if the infant was nursing the breast, the mother was put on a highly nutritional basic diet with cod liver oil), giving it regular doses of cod liver oil, for six months before doing a needling operation, discision or needling of the lens resulted in restoration of vision in eighty percent. The experiences with these children led me to use the same treatment with beginning opacities of the lens in adults, the dietary treatment being combined with the use of dionin two percent, sulphate of magnesia one percent; drop in eyes three or four times daily, which usually arrests or causes absorption of the opacity. If after a few months of this treatment the disease continues to progress, surgery is resorted to. In exudative choroiditis, the treatment has been dietary, protein therapy and alterative remedies.

In naso-pharyngeal and paranasal sinus, also ear diseases, unless there is a definite pathological condition, it can be relieved usually by drainage, ventilation and by fluids, alkalinization of the body and rigid adherence to a basic diet.

None could be more surprised at the result of this treatment than I have been. After placing patients, isolated in their mountains, on this regime, and urging them to come with me or go to a hospital and have surgical attention, I have returned months or a year later, expecting to find them dead, deaf or blind, only to see them not only comfortable, but to find the disease I had thought required immediate surgical treatment had disappeared or nearly so, and the eye, ear, nose or throat, as the case might be, had much the appearance of near normalcy. I have been so pleased with the results of my treatment in the last ten years that I have reached the point where I decline to begin the treatment of a trachoma case unless they promise to follow my instructions of a balanced diet and cod liver oil, and continue the treatment suggested for from three to six months. In this length of time the eye condition is so relieved and the general health so improved, they cheerfully continue the basic diet. I emphasize the fact that it is not a question of what the patient likes to eat or drink, but what he needs, and what is good for him. I forbid the use of tea, coffee or alcoholics. It must be remembered that we have been hundreds of years getting away from a biological balanced diet and one of the biggest problems confronting the medical profession is to teach the people what and when to eat to maintain health and efficiency; to eat to sufficiency, rather than to capacity, and to eat that which is needed for the maintenance of health and strength.

Summary: The solution of the problems referred to in this paper are to be found in correction of the nutritional disaster or deficiency,

and eradication of existing toxemia with the sub-oxidation which causes them.

The degenerative, obstructive, suppurative and catarrhal conditions most frequently encountered by ophthalmologists and otolaryngologists are primarily a local manifestation of a systemic condition which is an acidosis that can usually be relieved by alkalization, restoring perverted metabolism and maintained by a nutritious and balanced basic diet.

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MAJOR INFECTIONS OF THE HAND

THEIR DIFFERENTIAL DIAGNOSIS AND TREATMENT * †

SUMNER L. KOCH, M.D.

CHICAGO

Not every infection of the hand is a paronychia, a felon, an acute lymphangitis, a tendon sheath or fascial space infection. Hair follicle infections of the dorsum of the hand, and superficial infections of both the dorsum and palm frequently follow abrasions, cuts and penetrating wounds. Such infections do not differ from similar infections in other parts of the body either in their pathology, symptoms or in the treatment necessary for their localization and cure. The frequent occurrence of the types of infection first mentioned, however, and the fact that failure to recognize them promptly and to treat them in the most effective manner leads to such serious results, warrant constant and repeated emphasis upon their characteristic symptoms, and upon the methods of treatment that have been found to give the most satisfactory results.

Paronychia. A paronychia, as the name implies, is an infection alongside the nail. It usually follows the avulsion of a hangnail or the overzealous efforts of a manicure, possibly using contaminated instruments. The space into which the infection is introduced becomes sealed with a crust of serum, or is covered by the paronychium, the epidermal tissue which overlies the side of the nail. As infection develops in this closed space the tissues at the side of the nail become red, tense and tender, and the redness gradually extends upward, and around the base of the nail. At times a minute area of yellowish or greenish discoloration can be seen underneath the epidermis at the side of the nail; in other cases there is no definite evidence of localization, but simply diffuse redness, swelling, and exquisite tenderness, most marked at the point at the side of the nail where

the overhanging paronychium merges with the smooth skin of the finger tip.

If localization occurs at an early stage, as manifested by the yellow or green discoloration mentioned, it is possible with a sharp scalpel to shave off the thick epidermal layer, and permit the escape of a few drops of thick pus. The application of a hot, moist, sterile dressing for twenty-four hours then usually ends the trouble.

If there is no definite localization, but instead a spreading inflammation which tends to extend to the opposite side of the nail, hot, wet dressings should be applied for twenty-four or forty-eight hours with hope of bringing sufficient antibodies and white blood cells to the affected area to overcome the infection. If the infection progresses in spite of such treatment it usually indicates extension of the infection underneath the nail, a complication which is accompanied by increased redness and tension and by throbbing pain in the entire distal phalanx.

To secure drainage for this type of infection it is necessary to make an incision on each side of the nail, sufficiently far lateralward to prevent injury of the nail bed, to lift up the eponychium between the two incisions, and with a sharp-pointed scissors slipped underneath the nail to amputate the proximal one-third of the nail (Fig. 1). The eponychium is held away from the nail bed with a little wedge of petrolatum gauze, and a hot, wet dressing applied to the finger until the infection is under control. Usually at the end of forty-eight hours intermittent soaking in hot, sterile water or boric solution can be substituted for the continuous hot, wet dressing, and after another forty-eight or ninety-six hours a dry dressing applied.

Two complications may delay healing in such cases: Insufficient drainage and mixed infection. Insufficient drainage, usually due to failure to amputate enough of the nail, is evidenced by formation of excessive granulation tissue and persistent drainage of pus at the edge of the granulating mass. The remedy is to remove more of the nail. Mixed infection can be prevented by scrupulous care and cleanliness in the application of dressings. One must not forget, particularly in the cases of physicians and nurses, that an open wound or abrasion of the finger may be infected with the treponema pallidum, and that persistence of infection, with excessive granulation tissue formation, and with induration and bluish discoloration of the tissues about the infected area, indicate the necessity of a dark field examination and a Wassermann reaction.*

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From the department of surgery, Northwestern University Medical School, Chicago.

†A part of this paper, with Figs. 4, 6, 7 and 8, appeared in the JOURNAL OF THE INDIANA STATE MEDICAL ASSOCIATION, April, 1928. Through the courtesy of the editor the material referred to is reprinted in order to permit a more complete presentation of the subject.

*A physician consulted me six months ago because of a paronychia of six weeks' duration. At the outset it seemed to be a simple "run around." It was incised by his office colleague, but the swelling, purulent discharge, pain and tenderness persisted. At the suggestion of a younger brother, a student in a medical school, he was seen by two members of the surgical faculty, and the finger further incised on two different

Felon. A felon is an infection of the anterior closed space of the distal phalanx (Fig. 2). It usually follows a penetrating wound from a sliver, a pin, a surgical needle or tonsil snare. Because the thick palmar skin immediately closes over the site of entry the infectious material cannot escape. Its extension more deeply is favored by the col-

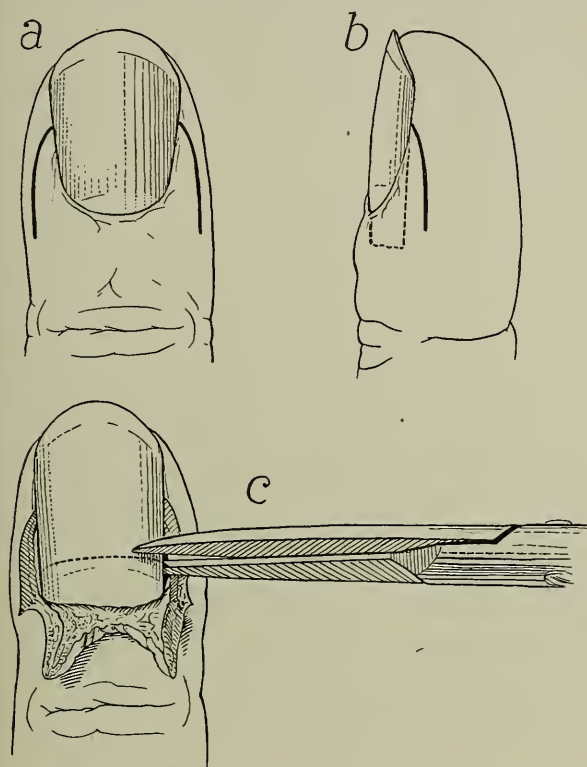


FIGURE 1. Method of securing drainage in a paronychia when the infection has extended underneath the nail. (The incisions must be far enough to the side to prevent injury to the nail bed; otherwise a split finger nail will result.) a,b. Lines of incision. c. Removal of proximal portion of nail.

umns of fat and glands which lie between the fibrous septa which incompletely divide the anterior closed space as they extend vertically from the skin to the periosteum of the distal phalanx (Fig. 2).

Because of the tension produced by exudation into an area limited on every side by firm, unyielding tissues the entire distal phalanx very quickly becomes tense, and throbs with pain. Usually when the physician is called the patient has been walking the floor, perhaps throughout the

occasions. Various forms of antiseptic dressings were applied without noticeable improvement.

When I first saw him the granulation tissue over the wound of the affected finger looked grayish and unhealthy; about one-third of the nail had been removed but on one side only. There were red streaks of lymphatic involvement extending up the hand and forearm, evidently due to a recent secondary infection. There were enlarged epitrochlear glands, and axillary induration and tenderness suggesting the formation of an axillary abscess. The patient looked pale and ill; he had lost fifteen pounds weight in six weeks.

He was immediately put to bed with a big hot, wet dressing over the entire upper extremity. Blood was taken for a Wassermann test and for blood sugar determination. The acute lymphangitis subsided in forty-eight hours. The blood sugar proved to be normal. The report of the Wassermann test was 4 plus. When told of the result of the test the patient immediately recalled the fact that he had been in contact with a possible source of infection approximately at the time the paronychia appeared, but the likelihood of such contamination had not impressed him sufficiently to suggest the necessity of a Wassermann test or a dark field examination.

night, supporting the affected hand with the other and suffering intense pain.

The distal phalanx of the affected finger is tense, red and swollen. There is no other external evidence of pus formation. The wound of entry may have disappeared; the patient may even have been unaware of the initial injury. There is no fluctuation because of the excessive tension, and any attempt to elicit it causes the patient to wince with pain. The symptoms are limited to the distal phalanx; movement of the finger does not increase the pain, and there are no red streaks of lymphatic extension running up the forearm. General symptoms are not pronounced; rarely is the temperature higher than 99.6 degrees.

With such a clinical picture there can be no doubt as to the presence of pus in the anterior closed space of the distal phalanx. The finger should be incised at the earliest possible moment, preferably under a general anesthetic such as nitrous oxide. An infected area should not be frozen with ethyl chloride, nor further traumatized by the injection of a local anesthetic.*

The incision can best be made at the side of the distal phalanx (Fig. 3). It should be long enough to give adequate drainage but should not extend so far upward as to endanger the sheath of the flexor profundus as it surrounds the tendon at its insertion on the base of the distal phalanx. The knife should be made to sweep across the finger (Fig. 3) so as to divide the fibrous tissue septa and convert the several potential spaces into a single space. The horseshoe-shaped incision advocated by some surgeons is slow in healing and frequently leaves a sensitive scar over the tip of the finger and an anesthetic area beyond the scar. I have not yet seen a case in which it was necessary to operate a second time because of incomplete drainage if an incision was made at the side of the finger in the manner indicated.

After the finger is incised a small wedge of petrolatum gauze is placed in the upper end of the incision to hold the wound edges well apart for twenty-four hours. A hot, wet dressing is applied to the finger, and the after care continued as in the case of a paronychia.

Acute Lymphangitis. Acute spreading infection of the lymphatics usually follow, as does a felon, a trivial injury—a penetrating wound from a sliver, a pin, a surgical needle or tonsil snare, or a scratch from a nail. Within a few hours of the injury the affected finger is hot and painful; there is a diffuse inflammatory reaction extending upward from the site of injury. Soon red streaks appear which extend up the forearm; the patient feels restless and ill; his temperature rises, he

*Within the past year we have had to amputate a finger because of moist gangrene following the freezing of a distal phalanx preparatory to incising a felon. Quite recently a case has been called to our attention in which injection of a local anesthetic into the digital nerves at the base of the thumb preparatory to incision of a felon was followed by neuritis of the median nerve and a paralysis of six months' duration.

has chilly sensations, and within twenty-four hours he may be acutely ill with repeated chills, high fever and prostration.

On examining the hand one finds the greatest reaction about the site of injury, but there is no evidence of pus formation; the symptoms are not confined to the distal phalanx, as in the case of a paronychia or felon; movement of the affected finger does not cause noticeable pain and does not exaggerate the symptoms present. Palpation of the elbow and axilla usually reveals tender and enlarged lymph glands even within twenty-four hours of the onset.

With such a clinical picture—a history of injury, local signs of inflammation, red streaks of lymphatic extension along the forearm and arm, and the early development of systemic symptoms

tion to it, and a few days later on a Saturday afternoon, Sept. 8, 1928, operated upon a patient with a Bartholinian abscess. The same evening he noticed that the finger was inflamed and painful. He felt restless and irritable, and finally went to his office and picked at the finger with a scalpel. All Saturday night the finger and hand throbbed and ached; he was restless and slept very little. Early Sunday morning he called a colleague, who "infiltrated the finger thoroughly with procaine. He then incised it, and he was certain there was no pus there, for he cut down to the bone."*

When I saw the patient Monday evening, September 10th, he was obviously very ill. Perspiration was standing in beads on his face and neck; his temperature was 103 degrees; he had had several severe chills. There was a thin serous discharge from an incision three-quarters of an inch in length on the palmar surface of the right index finger. Red streaks extended up the forearm and arm, converging toward the axilla. Fortunately no further surgery had been done and at the suggestion of a former student of Dr. Kanavel, who had seen the patient Monday morning, a massive hot, wet dressing had been applied to the entire upper extremity throughout Monday. This treatment was continued; fluids were administered in the largest amounts possible by mouth and rectum, and the patient made a gradual and uneventful recovery without definite localization of the infection or abscess formation.

The outcome in the majority of cases is not so fortunate a one. Too often the patient's resistance is insufficient to overcome the virulent infection; surgical interference causes wider diffusion of the infection; septicemia and pyemia rapidly develop, and the patient dies.

Tendon Sheath Infections. Tendon sheath infections usually result from direct inoculation or from extension of infection from the subcutaneous tissues. Their gravity lies in the fact that they spread with remarkable rapidity, and that destruction of the tendon sheath and of the tendon itself ensues in a very short time unless the infected area is drained, and prompt measures instituted to maintain the function of the tendons.

The tendon sheaths of the index, middle and ring fingers extend from a point just distal to the distal flexion crease of the finger to a line closely approximating the distal flexion crease of the palm (Fig. 4). They lie in close apposition to the palmar surface of the phalanges and are separated from the bone only by a thin layer of connective tissue. An infection of the flexor sheaths of any of these fingers makes itself evident very promptly by pain, swelling, inability to extend the fingers completely and by tenderness

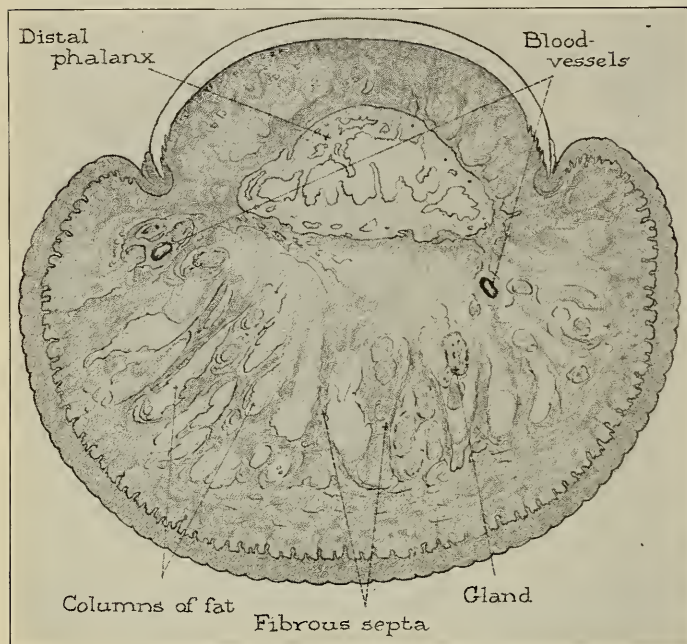


FIGURE 2. The anterior closed space of the distal phalanx. (After Kanavel.) (From the Journal of the American Medical Association.)

of acute infection—there can be no doubt as to the presence of a virulent and rapidly spreading infection, usually of streptococcal origin. Neither is there any question as to the wisest method of treatment. The patient should be put to bed, the entire upper extremity enveloped in a hot, wet, sterile dressing and fluids given in the largest quantity possible. Surgical intervention in such cases causes a rapid extension of the infectious process with disastrous results. Unless, in such cases, one can secure localization of the infectious process by conservative measures he may be sure that active surgical intervention will only hasten an inevitably fatal outcome.

A typical instance of such an infection came to my attention recently. A physician, forty-eight years of age, sustained a slight abrasion of his right index finger. He paid no particular atten-

*The words of the physician who incised the hand.

which corresponds definitely and accurately to the anatomical outlines of the tendon sheath.

The sheath of the long flexor of the thumb begins at a point slightly distal to the distal flexion crease of the thumb, and accompanies the flexor pollicis longus through the palm to terminate a thumb's breadth above the anterior ligament in an expansion known as the radial bursa (Fig. 4). Over the first metacarpal bone it lies between the flexor pollicis brevis and the adductor obliquus. The motor branch to the muscles of the thenar eminence lies superficial to the tendon sheath, approximately a thumb's breadth above the annular ligament. The bursa ends in a blind pouch under the tendon and upon the pronator quadratus, separated by the latter from the wrist joint and the radio-ulnar joint.

The tendon sheath of the flexors of the little finger begins just distal to the distal flexion crease of the fifth finger and extends proximalward to become continuous, in the majority of cases, with the ulnar bursa, a good sized sac which lies over the metacarpal bone of the ring finger and the base of the middle metacarpal bone, and extends proximalward under the anterior annular ligament a thumb's breadth above the ligament (Fig. 4). Here it lies underneath the flexor tendons, upon the pronator quadratus muscle, and is separated by this muscle from the wrist joint (Fig. 5). In the region of the wrist joint the ulnar bursa forms a more or less complete sheath for the flexor tendons, being pushed radialward, as it were, in three pockets—one superficial to the tendons, one between the superficial and deep tendons and one, the largest and most easily distensible, underneath the deep tendons.

The exact arrangement of the tendon sheaths in the proximal portion of the palm and over the wrist is subject to considerable variation. The important fact from a practical standpoint is that in the majority of cases the radial and ulnar bursæ communicate with one another by way of an intermediary sheath, so that an infection of the tendon sheath of the thumb and radial bursa usually extends to the ulnar bursa and distally along the tendon sheath of the little finger. An infection arising in the tendon sheath of the fifth finger involves the same structures in the reverse order. From these various sites infection may extend to a number of different places, as will be indicated later.

The diagnosis of a tendon sheath infection is based on symptoms which early in the course of the infection are limited to the area involved, but which tend very quickly to become more difficult of interpretation because of extension of the infection to surrounding tissues. These symptoms are pain, tenderness and other signs of inflammation, frequently out of proportion to the extent of the infected area. The patient holds the affected finger in a slightly flexed position. Any

attempt to extend it causes him to wince with pain. By gentle pressure an area of tenderness may be outlined which corresponds accurately to the anatomical outline of the tendon sheath. In infections of the fifth finger Kanavel¹ has pointed out that a point of maximum tenderness may be found just proximal to the point where the distal flexion crease of the palm crosses the flexor tendons of the fifth finger. At this point the tendon sheath lies close to the surface and is not covered by overlying muscles. In every case the dorsum of the affected finger is swollen and edematous because of the direction of lymphatic drainage.

If the infection involves only the index, middle or ring finger there is no doubt as to its location and the freedom of other fingers from infection. With infection of the radial and ulnar bursæ the inflamed swollen wrist, with the tense anterior annular ligament drawn like a taut cord across

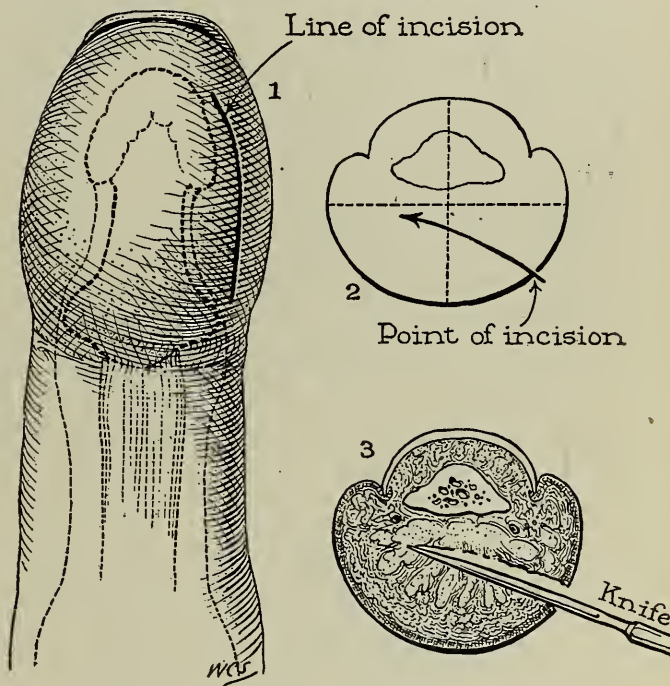


FIGURE 3. Method of incising a felon for drainage. (From the Journal of the American Medical Association.)

its volar surface, suggests at once the extension of the infection into the forearm. Since in more than eighty percent of cases the radial bursa communicates with the ulnar bursa above the wrist it is common to find involvement of both bursæ. In early cases, however, it may be difficult to determine whether one is dealing with one of the less common types in which the bursæ do not communicate with one another. If, for example, the infection has begun in the thumb and spread into the radial bursa one wishes to be certain whether the ulnar bursa and the tendon sheath of the fifth finger are involved. In such a case the position in which the fifth finger is held, the presence of pain on attempted extension of the finger, and the presence of the point of maximum

tenderness mentioned above are important considerations. If one is still in doubt it is wise through a bloodless field to make an exploratory incision in the palm over the sheath of the flexor tendons of the fifth finger. If no infection is present no harm will be done by such a procedure, but irreparable injury may be done if the infected sheath is not drained. If the primary infection involves the tendon sheath of the fifth finger the same considerations apply with reference to the radial bursa and the flexor tendon sheath of the thumb.

In cases which have been neglected for four or five days, or which have been drained inadequately, the median and ulnar nerves may be so compressed by the pressure of the exudate above the wrist as to be partially anesthetized. In such

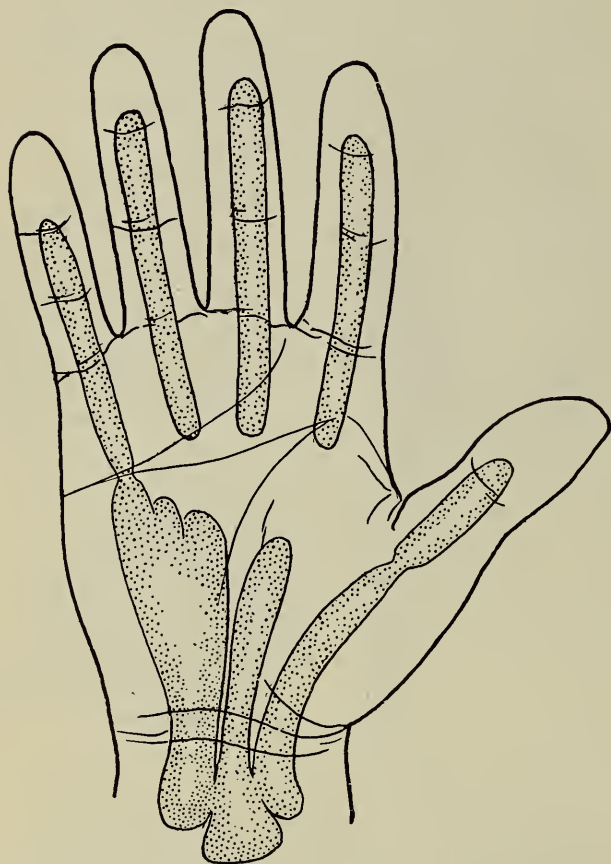


FIGURE 4. The relation of the flexor tendon sheaths and the radial and ulnar bursae to the superficial markings of the hand.

cases the characteristic symptoms mentioned above—particularly the excruciating pain caused by forced extension of the affected fingers—are masked, but the history, the location of the primary lesion, the bulging swelling above the wrist, and the general symptoms of severe infection make the diagnosis clear.

When rupture takes place from the tendon sheaths of the index, middle or ring fingers the pus spreads into one of the fascial spaces of the palm, and forms an abscess of the thenar space or the middle palmar space. (These will be dis-

cussed under infections of the fascial spaces.) When rupture takes place from the radial or ulnar bursa the pus at first lies in the retroflexor space between the flexor tendons and the pronator quadratus (Fig. 5). As it spreads upward it dissects between the superficial and deep flexor muscles and tends to become superficial along the ulnar side of the upper third of the forearm. In such an event the entire hand and forearm are dusky red, swollen, tense and edematous. Vesicles or blebs may cover large areas of the affected extremity. Because of the extent of the involvement and the retention of a large amount of pus under pressure toxic absorption proceeds at a rapid rate and the general symptoms of severe infection—high fever, rapid pulse, profuse perspiration, prostration, and not uncommonly delirium—indicate the extreme gravity of the condition.

Infection of the Fascial Spaces of the Palm. These include the thenar space, the middle palmar

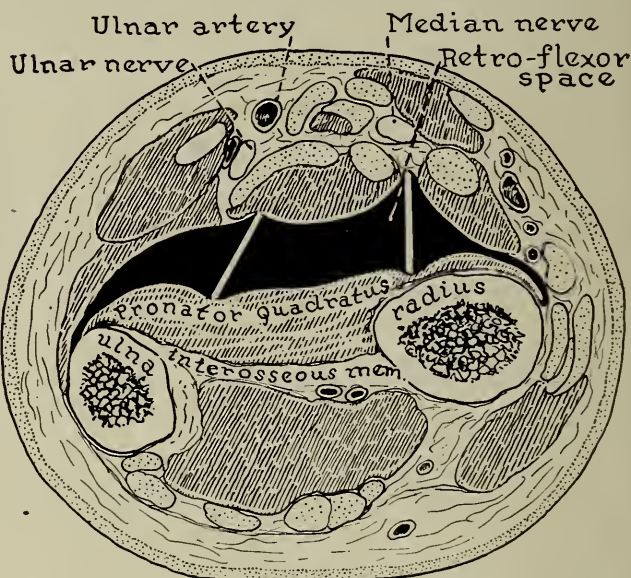


FIGURE 5. The retroflexor space above the wrist where pus is found after rupture of the radial and ulnar bursae. (After Kanavel.)

space and the lumbrical canals which extend distalward from the thenar and middle palmar spaces along the lumbrical muscles. Infection of the fascial spaces of the palm may occur by direct inoculation and as the result of deep penetrating wounds, but most commonly occurs as the result of extension of a tendon sheath infection.

The thenar space lies upon the adductor muscles of the thumb partially covered by the short muscles of the thenar eminence, by the flexor tendons of the index finger and by the accompanying digital vessels and nerves (Fig. 6). It extends ulnarward to the middle metacarpal bone. The middle palmar space lies deep in the palm upon the interosseous muscles, underneath the flexor tendons of the middle and ring fingers (Fig. 6). On the radial side it extends to the middle metacarpal bone. On the ulnar side it is

partially covered by the overlying distal end of the ulnar bursa.

Tendon sheath infections arising in the index finger tend to rupture into the thenar space. Tendon sheath infections arising in the middle and ring fingers usually rupture into the middle palmar space. In neglected cases tendon sheath infections starting in the thumb may rupture into the thenar space, and tendon sheath infections arising in the fifth finger into the middle palmar space. With pus under great tension rupture from one space into the other may take place.

The symptoms of thenar space infection are pain, tenderness and swelling of the thenar eminence. Normally the thenar eminence is the most prominent portion of the palm, but with infection in the thenar space it stands out in such a pronounced fashion as to elevate the thenar eminence still more above the remainder of the palm and force the thumb away from the hand. The dorsum of the web between the thumb and index finger is swollen and edematous. Eventually there is

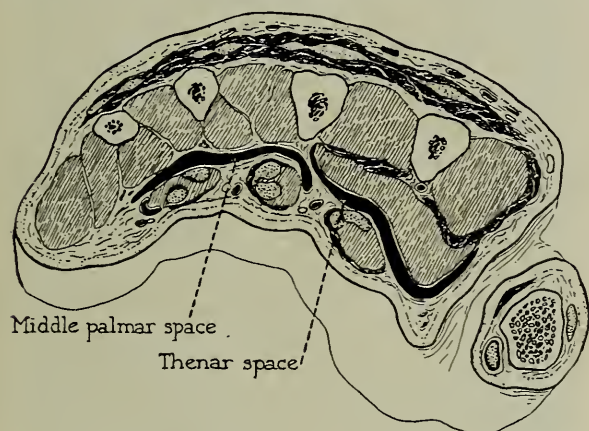


FIGURE 6. Cross-section of the hand, above the metacarpophalangeal joints, to show the relation of the thenar and middle palmar spaces to the surrounding tissues. (After Kanavel.)

extension of the infection along the lumbrical canal on the radial side of the index finger, with tenderness and swelling on the dorsum of the hand between the index and middle fingers.

With infection of the middle palmar space the striking symptoms are the loss of the normal concavity of the palm and the edema and swelling of the dorsum of the hand. Because the pus lies under the flexor tendons and the firm palmar fascia the palmar swelling is not pronounced, but it is sufficient to change the normal concavity of the palm into a slight convexity. Because of the direction of lymphatic drainage the dorsum of the hand is swollen and edematous, but pus will not be found on the dorsum except in those neglected cases in which the infection has extended distalward along the lumbrical canals and passed to the dorsum in the subcutaneous tissue about the web of the fingers. Only in grave, neglected infections in which osteomyelitis has taken place does pus find its way through the barrier of deep

fascia, interosseous muscles, and metacarpal bones from the palm to the dorsum of the hand.

Treatment of Tendon Sheath and Fascial Space Infections. The treatment of infections of the tendon sheaths and fascial spaces is to secure adequate drainage as soon as the condition is recognized. This should be done under a general anesthetic such as nitrous oxide, ethylene or ether, and through a bloodless field secured with the aid of a constrictor.

In draining the tendon sheaths of the fingers the incision should be made well to the side of the finger (Fig. 7), so as to avoid the digital nerves and blood vessels, the flexion creases on the palmar surface, and so as to prevent herniation of the tendon from its sheath, a complication that occurs very promptly if the sheath is opened through the middle of the palmar surface of the finger.

On incising a finger with infection of the tendon sheath one is always surprised by the extensive swelling of the subcutaneous tissues, and by the manner in which they seem to fill the entire wound and obstruct the deeper structures from view. Unless this edematous tissue is well retracted it is impossible to secure a clear view of or even to expose the deeply lying tendon sheath. If one can expose the sheath for a little distance before incising it with the scalpel he will find, instead of a thin translucent membrane through which the shining tendon may be discerned, a grayish edematous structure which resembles the edematous peritoneum overlying an appendiceal abscess. The moment it is opened the pus pours out. In very early cases the pus may not yet fill the sheath, and may appear only when the tendon is raised from the posterior surface of its sheath.

If the flexor sheaths of the thumb and little finger are involved the incisions must be extended upward (Fig. 7). One should avoid cutting through the muscles of the thenar eminence in the case of the thumb by making a curved incision to the ulnar side of the thenar eminence and retracting the thenar muscles radialward, and should remember that the flexor tendons of the little finger run obliquely upward and radialward and not in the line of the fifth metacarpal bone. Such an infection also requires an incision on the ulnar side of the forearm to drain the upper, most distensible portions of the ulnar and radial bursæ (Fig. 7). It should always be made at the side, never over the middle of the volar surface, for the pus lies underneath the flexor tendons (Fig. 5). A median incision in such a case inevitably leads to extensive fibrosis and destruction of tendons and frequently to operative or postoperative injury of the median nerve.

The middle palmar space is drained through an incision between the middle and ring fingers, extending from just above the web of the fingers to the middle flexion crease of the palm. The

flexor tendons, digital nerves, and blood vessels of the middle finger are retracted to the radial side and the corresponding structures of the ring finger to the ulnar side. The middle palmar space, as it lies behind the flexor tendons, is then widely exposed. Occasionally an additional incision over the lumbrical canal of the ring finger helps to make drainage more complete and hasten recovery. Through the incision indicated for drainage of the thenar space (Fig. 8) a pair of forceps or Kocher dissector is passed upward and ulnarward directly into the abscess cavity as it lies upon the adductor muscles of the thumb.

If drainage incisions are located correctly and of adequate length, an incision on one side of



FIGURE 7. Lines of incision for drainage of the tendon sheaths.

the affected fingers and on the ulnar side of the forearm, in the case of ulnar and radial bursae infections, suffices for drainage. The use of through-and-through drainage above or underneath a flexor tendon should be carefully avoided. It is the surest possible method of causing necrosis of the tendons.

With infections of the middle palmar and thenar spaces, drains should never be inserted through and through from the palm to the dorsum of the hand. The spaces in question are sep-

arated from the dorsal surface by a number of anatomical layers (Fig. 6). Plunging a pair of forceps through the deep volar fascia, the interosseous muscles, between metacarpal bones and through the dorsal aponeurotic and subcutaneous layers in order to drain an accumulation of pus in one of the fascial spaces of the palm renders almost certain the development of osteomyelitis and the formation of persistent sinuses.

After Treatment of Tendon Sheath and Fascial Space Infections. In order to stop venous oozing after operations and to keep wound edges widely separated drainage wounds are packed lightly with gauze impregnated with petrolatum. Occasionally rubber tissue is used instead. Tubes are never used because pressure necrosis of tendons and tendon sheaths and extensive fibrosis involving tendons and nerves inevitably result from their use.

In dressing the hand a large sterile towel is laid on the arm board, covered with abdominal pads and sterile dressings, and the outstretched arm is laid on the bed of dressings. More dressings are added to cover the arm; the dressings are saturated with a hot, sterile boric or salt solution and the edges of the towel brought together to enclose the whole. The hot solution or sterile water is added at two-hour intervals without changing the dressing and a powerful electric light is suspended above the arm to help maintain the heat.

At the end of twenty-four hours the dressings are removed and a sterile dressing reapplied with the same care that was used in applying the original dressing. If one can avoid adding secondary infection, particularly to streptococcic infections of the tendon sheaths, as has been so well shown by Cleveland³ and by Garlock⁴, the tendons may be saved and a complete restoration of function secured in a considerable proportion of cases.

The petrolatum gauze is removed at the first or second postoperative dressing. No drainage material is reinserted after removal of the original drains.

As soon as the acute symptoms have subsided, usually at the end of three or four days, an arm bath, used for fifteen or twenty minutes twice daily, is substituted for the continuous moist dressing. After being soaked in a hot, sterile solution the arm is laid on a sterile towel, allowed to dry for a half hour under an electric light and covered with a dry dressing. While the hand is in the bath the patient is urged to move his fingers gently to prevent the formation of fibrous adhesions. Simply moving the fingers through their complete range of motion once or twice daily during the period of forced immobilization will suffice to prevent the formation of crippling adhesions. In addition to the dry dressing a light aluminum splint is applied to maintain the hand and the fingers in the position of function. As

soon as the danger of lighting up the infection has passed physical therapy and active exercises are begun so that restoration of function may keep pace with the healing of the tissues.

In neglected cases in which extensive contractures have been allowed to develop, often because of prolonged immobilization of the hand in a big moist dressing with the fingers extended and the thumb lying alongside the fingers, considerable improvement may still be secured by the persistent use of physical therapy, of exercises designed to mobilize the affected fingers and of properly designed splints which bring elastic tension to bear on the contracted tendons and stiffened joints. Carefully planned operative procedures, designed to free the fibrosed tendons and nerves from the scar tissue which binds them to one another and to the surrounding tissues and to separate them



FIGURE 8. Line of incision for drainage of the thenar space.

from underlying bone and covering skin with thin flaps of fat, may be utilized in selected cases. Substitution of new tendons for tendons which have been destroyed and mobilization of ankylosed joints by excision of bone and interposition of thin flaps of fat will bring about a partial restoration of function in those unfortunate cases in which the hand is held immobilized in a vise of scar tissue.

Summary. The major infections of the hand are paronychia, felons, acute infections of the lymphatics, of the tendon sheaths and of the fascial spaces of the palm. They should be recog-

nized without difficulty for they present definite and unmistakable diagnostic criteria.

Lymphatic infections should be treated conservatively and operated upon only when there are unequivocal signs of pus formation. Infections alongside and underneath the nail, infections of the anterior closed spaces of the distal phalanx, of the tendon sheaths, and fascial spaces of the palm should be drained carefully and adequately as soon as the diagnosis is made.

In the post-operative care of hand infections the prevention of secondary infection, early mobilization and the maintenance of the hand in the position of function during the period of enforced immobilization are important details of treatment.

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THE FIRST STAGE OF LABOR*

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INDIANAPOLIS

The first stage of labor is commonly defined as that period extending from the onset of true labor pains to the complete effacement and dilatation of the cervix.

Often we observe dilatation up to one-third in the preparatory stage before the onset of painful contractions, and again, in certain instances, the process never is completed; hence it is obvious that irregularities exist, and a knowledge of these is essential for success.

In the past few years prenatal care and the second stage of labor have held the stage in obstetrics, and benefit has come to both mother and child from this teaching, but it is in the first stage of labor where the sins of omission during prenatal care bear their fruit, and the sins of commission during the second stage of labor have their inception.

A study of the vital statistics of our state which relate to deaths from puerperal causes is illuminating in connection with the above statement. I present these statistics in five-year periods, thinking that span most suitable for our comparison, and present the statistics on infant deaths, since they likewise reflect on obstetric practice. Because of the wonderful benefit which has been achieved by propaganda of the medical profession against tuberculosis, I include these statistics merely for comparison. Perusing these statistics is very stimulating and encouraging since we see improvement for our state in every class but one; such improvement is not observed in the statistics

*Presented before the Section on Surgery of the Indiana State Medical Association at the annual session held in Evansville, September, 1929.

of all states individually, nor in the statistics of the entire registration area of the United States.

STATE OF INDIANA

TOTAL DEATHS FROM THE PUERPERAL STATE

	1928		1923		1918	
	Total	Rate	Total	Rate	Total	Rate
Maternal Deaths:						
Accidents of pregnancy.....	86	2.7	31	1.0	92	3.1
Puerperal hemorrhage.....	15	.5	39	1.3	38	1.3
Other accidents of labor.....	63	2.0	44	1.4	21	.7
Puerperal septicemia.....	109	3.4	186	6.3	245	8.4
Puerperal convulsions.....	68	2.1	73	2.4	102	3.5
Puerperal embolus, etc.....	22	.6	19	.6	27	1.0
Total Puerperal Causes	363	11.5	392	13.0	525	18.0
Maternal deaths per 1000 births		6.0		6.0		8.1
Infant Deaths:						
Premature birth.....	988	31.3	1121	38.2	1227	42.1
Injuries at birth.....	152	4.7	166	5.6	111	3.9
Lack of care.....	10	.3	13	.4	5	.2
Hydrocephalus.....	29	.9	31	1.0	30	1.0
Malformation of the heart.....	220	6.9	267	9.0	229	7.9
Other malformations.....	93	3.0	97	3.2	209	7.2
Other causes in early infancy.....	435	13.6	537	18.2	481	16.5
Infant deaths under 1 yr.	3,760		4,630		5,685	
Infant deaths per 1000.....		62.4		71.2		88.4
Total births.....	60,294	19.1	65,104	22.2	64,313	22.1
Total deaths from tuberculosis.....	2,314	73.4	2,779	94.7	3,969	136.3
Death rates shown are per 100,000 population.						

According to these statistics greater progress has been made in maternal care than has been achieved in conquering tuberculosis. To conserve time I will dwell only on the class of "other accidents of labor," and their increase suggests to my mind errors of judgment in the first stage of labor and I will try to present some of the pitfalls as they occur in practice and which are not sufficiently emphasized in text books. These will relate to the pelvis and to the uterus.

Careful pelvimetry is being practiced by an ever-increasing number of physicians, but the measurements of the false pelvis may, by their relations, suggest a normal pelvis and failure of the normal progress of labor is the first intimation of error in diagnosis. If the head does not engage at thirty-eight weeks, internal pelvimetry should be done, no matter how normal the external measurements may be.

The extremes of pelvic pathology usually are recognized, but there is no law which can be applied to the gradations to determine the probable course of labor, and the test of labor must still be resorted to, humiliating though it may be, as recent statistics published by Baily and Wilson (*Journal of A. M. A.*, December 17, 1927) still give the gratifying result of 66 percent spontaneous deliveries in 647 cases of contracted pelvis so treated.

It is imperative here to realize that the test of labor has vaguely defined time limits, and we must accept our responsibility in this testing and not permit uterine inertia, rigid cervix, and delays from posterior position to exhaust mother or child while we are waiting to observe the test of labor, as the test of labor presupposes good contractions and progressing dilatation.

Much practical information can be learned concerning the relation existing between head and

pelvis at the inlet by the method described by Pinard, who grasps the child's head between the fingers of both hands and exerts pressure into the pelvic inlet, or the method of Munro Kerr, who grasps the head between the thumb and fingers of one hand while with two fingers of the other hand in the vagina, and the thumb over the symphysis pubis, he estimates the degree of descent or the overriding of the head over the symphysis while making pressure in the direction of the plane of the pelvic inlet.

The salient features in considering the pelvis are:

The sacrum, the promontory thereof, its distance from the symphysis pubis, its position in the cavity of the pelvis, and whether high or low in its relation to the symphysis pubis, the width of the base of the sacrum, the length of the sacrum, the degree of vertical and horizontal concavity, the regularity of its curves, its rotation on its sacro-iliac axis. The average hand cannot reach the promontory of the sacrum in the normal pelvis in most women in the usual office examination. If you reach it, accept it with suspicion of contraction. The ossa innominata, the depth of their curve at the linea terminalis, the vertical depth of the portion which enters into the formation of the true pelvis, the convergence of their lateral walls in the cavity.

The symphysis pubis, its depth, the position of its vertical axis, and the contour of its posterior surface.

The rami of the pubis, their length, thickness, torsion and degree of separation at base.

The rami of the ischii, their length and curvature.

The coccyx, its length, flexibility and direction of its axis.

The sum of the relation existing between these salients in each individual pelvis decides whether it is normal. A deviation of one and one-half cm. in any of these is considered a contracted pelvis and the location of the abnormality will determine the type of pelvis created thereby, and will likewise determine the planes of the pelvis, which are an important factor in labor, as well as the dimensions.

The types of pelvis which predominate in our practice are the generally contracted pelvis, the infantile type, the masculine type, and the funnel type, none of which probably will be recognized by external measurements of the false pelvis by the novice, but which are suggested by either or several of the following:

1. Narrow genital escutcheon.
2. Reduction in all dimensions.
3. Long external oblique conjugate in comparison with transverse diameters.
4. Depth of pelvis.
5. Distance between tuberosities at outlet.

Whenever this last diameter is less than eight cm., do not neglect to determine anterior and posterior sagittal of outlet, as in the mechanism of labor, the posterior sagittal is the essential for termination.

The pelvis, however, is only one factor in the equation of labor and in our study of the pelvis we must include the head of the child. We must estimate its size, hardness, and moldability, determined by the degree of ossification, size of fontanelles and sutures, and we must determine the position in which the presenting part approaches the pelvic constrictions, the posterior position contributing greatly to the pathology of labor. While mensuration of the fetal head cannot be performed with scientific accuracy, the relative proportions existing between head and pelvis can be determined by careful palpation and more valuable information can be obtained by the roentgenogram, more particularly by the lateral projection.

The frequency of the posterior position is greater than text books state. If we observe the case early in the onset of labor, we find the head in the transverse more often than in the oblique, and if we then determine position by the location of the back, we find the posterior position more frequent than suspected. The effect of uterine contractions is to create descent; this and the resistance met by the impact of the fetal parts with the pelvis and spine tends to throw the head into oblique and the spine anteriorly. When the angle of the plane of the inlet is greater than fifty-five to sixty degrees, as in excessive lumbar curve, the presenting part is thrown anterior to the center of the pelvic inlet and the occiput meets less resistance posteriorly, hence the posterior position persists. Engagement usually occurs late, and since rotation does not occur until the floor of the pelvis is reached, the labor necessarily is prolonged and the patient may become exhausted. After several such experiences, the obstetrician begins to fear the posterior position and in his consternation may lose his faculty of better judgment and instead of analyzing carefully his case and providing easement of suffering while observing the effect of labor, he frequently contaminates her by repeated vaginal examination and by too early interference does extensive injury to the patient and reduces his percentage of success. Do not forget that manual and instrumental procedures for anterior rotation of the occiput are devised mostly for the second stage of labor and imply complete dilatation of the cervix. In the experience of the writer manual external rotation in the first stage of labor has succeeded only in those cases where the natural mechanism of labor would have created the same end result with none of the danger and discomfort associated with the maneuver.

In the breech position, however, engagement of breech and entry of head into the pelvis is favored

by the plane of the inlet being more vertical than the average normal. Early rupture of the membranes is a calamity which frequently contributes to the dilemma. This is due to the reduced protection received from the imperfectly fitting presenting part and to the variability of tensile strength of the sub-amniotic connective tissue. When this occurs, not only is the dilator of the cervix substituted by one less favorable, but the even, stimulating pressure on the cervical plexus is removed, thus affecting the regularity of the contractions. The frequency of occurrence and effect upon labor and morbidity is presented in a very comprehensive paper taken from the obstetrical service of the University of California by Dr. Margaret Schulze (*A. J. O.*, Jan., 1929, p. 20). She reports occurrence of rupture of membranes at onset of pains and child at age of viability, 604 times in 6,500 cases, or 9.3 percent. In primiparæ (most frequent at age of twenty), 12.34; and multiparæ, 7.12 percent. Lack of engagement of head present in primiparæ, 39 percent; multiparæ, 34 percent; occipito-posterior position in 14.2 percent, while present in 10 percent in total 6,500 cases. Breech position 6.1 percent.

Onset of pains occurred after ruptured membranes (within one hour) in.....303 cases
Onset of pains was delayed more than 24 hours in 57 cases
Onset of pains was delayed more than three days in 13 cases
Onset of pains was delayed 5, 6, and 7 days in 2 cases each.
Onset of pains was delayed 17 and 19 days in 1 case each.

Duration of labor in above series:
Primiparæ Multiparæ
First stage...12.1 hours; first stage... 7.1 hours
First stage—(Williams)
16.0 hours; first stage...11.0 hours

	Percent
Maternal mortality	00.0
Maternal morbidity in 6,500 cases.....	12.8
Maternal morbidity in dry labors.....	15.9
Maternal morbidity in non-operative cases...	14.4
Maternal morbidity in operative cases.....	22.0
Maternal morbidity where membranes rupture over 24 hours	17.8
Maternal morbidity in dry labors where labor lasted over 24 hours.....	37.2
Maternal morbidity where Voorhees bag was used	21.
Fetal mortality	5.
Fetal mortality average—Williams, 7 percent; Sloane maternity.....	7.2
Operative interference became necessary in ..	8.1

Another factor to be reckoned with in the first stage of labor is the rigid cervix. Our present conception of the uterus is that it is composed of an upper muscular portion which provides the

dynamic power in labor and the elastic, less muscular lower segment which, while contributing to the capacity of the uterus, plays but a passive part in parturition. The mechanism of cervical dilatation has not been finally solved, but to recall a number of acknowledged conditions which act detrimentally will help materially.

I will enumerate—

I. Congenital anomalies of development. Fortunately these are rare in their extreme degrees and would be recognized during the course of labor, but the lesser degrees, *e. g.*, short posterior or lateral lip of the cervix, irregularity of cervical canal, long taper tip cervix, etc., while they usually yield to the process of labor, retard the progress and contribute to the difficulties.

II. Mechanical incarceration of cervix by existing disproportion between head and pelvis.

III. Early rupture of membranes, while the effect in the reported cases was not to prolong labor, it is associated so frequently with pathological disproportion and incarceration of cervix that it should always stimulate to the exercise of greatest care.

IV. Adhesions between chorion and cervix, a condition which is not at all rare and yet is frequently overlooked.

V. Fibrosis of the cervix, doubtless the most frequent and difficult condition to cope with in connection with the cervix. Matthieu and Schauflier in a paper on rigidity of the cervix tell the story very completely when they say, "The racimose nature of the glands of the cervix, its exposed situation, and its frequent subjection to trauma and bacterial invasion make it the common seat of chronic infection. Physical, chemic, and bacterial irritation keep up a slow, smouldering destruction of the specialized muscle and elastic fibers, which are replaced by the faster growing, harder, but nonexpansile, scar tissue cells. All other things being equal, the ability of the cervix to dilate is directly proportionate to the amount of muscle and elastic tissue elements as compared to the fibrous tissue content. The arrangement of the scar fibers, however, is important. They contract or shrink with time, and do not again relax. If their arrangement is circular, their action simulates sphincteric closure. If they are irregularly disposed, they may cause distortions, knots or bands interfering with the orderly dilatation of the parturient canal. We believe that this substitution process, due to whatever cause, is present in practically every true rigidity or stenosis of the cervix."

VI. True spasmodic rigidity of the cervix is obviously rather difficult to establish without subjecting the cervix to histologic study. Since it is not the nature of muscle fiber to remain in spasmodic contraction any great length of time, it seems more reasonable to assume that the spasm is created by an interference of normal function

by the coexistence of one of the previously mentioned conditions.

VII. Faulty presentation usually attended by early rupture of membranes and creating a condition as described in II and III, the even distention of the lower uterine segment and pressure or tension on the cervical ganglion being absent, the normal mechanism of labor is disturbed and progress delayed.

In connection herewith we should consider the preparatory stage of labor. Our first intimation of the onset of labor usually is that the patient reports the development of pain, and our first convincing evidence is beginning effacement and dilatation of the cervix. After having heard from sympathetic friends all about the terrible ordeal which is in store for her during labor, the patient is prompted frequently by her eagerness and desire to have it all over, to resign herself to the inevitable and plunge into labor, hoping to gain the reward for her suffering after a few hours of endurance, and when the physician says there is no progress, the courage and fortitude fail in a direct ratio with the exaggerated susceptibility to pain, and the despair of the patient and consternation of the family frequently spell disaster for the physician, not only from loss of confidence of his patient, but by plunging with his patient into the ordeal of getting it over, and starting dangerous procedures where patience and sedatives would lead to a safer reward.

To differentiate between the preparatory stage of labor and true uterine inertia again requires careful deliberation with consideration of etiology, viz:

1. Poor general health or exhaustion, cardiac disease, pulmonary disease or anemia.
2. Poor uterine development, infantile uterus, or poorly developed innervation.
3. Pathological pelvis.
4. Abnormal presentation of presenting part.
5. Abnormal position of uterus, pendulous abdomen or peritoneal adhesions.
6. Overdistention of uterus, twins, polyhydramnios, large child.
7. Tumors of uterus myomata or fibrosis due to
8. Endometritis, metritis, endocervicitis with adhesions of membranes.
9. Old primipara or too frequent child bearing.
10. Hyperesthetic or nervous instability.
11. Contused lower uterine segment from excessive activities of patient, *e. g.*, automobile riding.

A careful diagnosis helps to establish a course of procedure and the composure and self-confidence of the physician creates morale and cooperation in the patient and attendants.

In the successful management and the treatment of the first stage of labor lies the atonement for the neglect and oversight which occurred in prenatal care, recognition of pathology, pains-

taking preparation and scrupulous observation of aseptic technique are certainly the first and greatest obligations. Inability or unpreparedness to perform the required surgical procedure necessary to terminate a given case are no disgrace. We cannot be expert or even efficient in all directions, and the ignorance or egotism which will prompt any man to attempt upon the person of a patient entrusted to his sacred care any operation for which his training and experience have not qualified him is just as criminal as the careless and imperfect observation of asepsis that we sometimes observe. The cleansing of the patient and maintenance of asepsis is just as much the doctor's responsibility as the performance of the operation, and under the best of asepsis the parturient canal during labor should not be manipulated except for specific indications, *e. g.*, to clear a diagnosis impossible by rectal examination or to perform some corrective procedure. The use of mercurochrome in the vaginal canal before examination or operation has reduced morbidity markedly for some operators and is gaining favor with increasing numbers. The skill in alleviating pain is an accomplishment which is rewarded not only by the good-will of grateful patients, but likewise by correction of some of the abnormalities of presentation.

Nervous instability, extreme pain from chronic pathology of the uterus, *e. g.*, endometritis, spasm of cervix, compression of scars in lower uterine segment, are an indication for analgesia, and relieving the pain of normal childbirth will remove much of the dread of maternity, will be a powerful weapon against the cults in medicine, and is a privilege accorded the physician which he certainly should use when it does not jeopardize the well-being of the child.

Morphine in dosage of gr. 1/6 is safe in its effects on the child. Whether this should be repeated will depend entirely upon the stage of labor when its beneficial effect wears off. It is not wise to use morphine within two hours before expected termination of labor, not alone because it may depress the fetal respiration at birth, but because the suffering of the mother will be so great at that time that gr. 1/6 will not give the desired effect and intermittent inhalation anesthesia of either nitrous oxide gas, ethylene or chloroform or ether will produce better results. Whether there is or is not synergistic effect of solution magnesium sulphate fifty percent in two cc. doses repeated at half-hour intervals for two or three doses, it is justifiable to use it since when given intramuscularly it does no harm and the insult to the patient when given hypodermically is not so great but that it can be pardoned even though it may reflect on the intelligence of the physician. Scopolamine has become less popular with the profession, more from the close supervision which it requires and from the lack of familiarity with

the drug, than from its real danger. The inhibition of contractions and their effect is more fancied than real, as proven by the experiments of Drs. Schwartz and Krebs (*Am. Journal Surgery*, Oct., 1925). The depressing effect on the respiration of the child is not active when not used in too large a dosage and not given too near delivery. Familiarity with the effects of drugs is the deciding factor for or against their use in the hands of any individual, and ignorance thereof is a valid argument against their use for such individual, but does not give him the moral or ethical right to criticize his competitor who through greater application has mastered the art of securing results safely. Ether per rectum according to the method of Gwathmey is reasonably safe and produces results in sufficient frequency to justify its use by anyone who has had medical training. If used too early it may inhibit labor, and if used too late, results will not be gained because of the slow rate of absorption and disproportion between pain and effective dosage. Do not forget to evacuate the bowel with an enema about one hour before administration; be sure there are no fissures or ulcerations of the rectum and follow the mixture with warm olive oil or liquid petrolatum that it does not remain low in the rectum, and syphon off remaining mixture after delivery. Inhalation anesthesia is not so adaptable as instillation anesthesia in the first stage of labor except for procedures aimed at overcoming obstacles to progress or at the termination of the first and through the second stage, as their prolonged administration is deleterious to both mother and child, besides exhausting the physician to a degree to make him unfit when the duties of the second stage call.

Support of the patient in the first stage must not be neglected. Small quantities of food and sufficient fluids should not be forgotten. Stimulation of feeble and fruitless pains with hot drinks, sugar, strychnia, and quinine, while seldom called for, must not be forgotten. Pituitrin has no place in the first stage of labor in any dosage because of the uncertainty of its effect. Atropine gr. 1/100 for spasticity of the cervix at times is followed by seeming results, what matters whether by relaxing sphincteric muscle spasm or dilator muscle spasm affected by scar tissue, or by depressing general sensibility. Chloral hydrate and sodium bromide and barbituric acid preparations, and the hot pack, all have a field in the first stage of labor at times and should be kept in mind. Sodium amytal intravenously or rectally does not inhibit the frequency or intensity of uterine contractions and has no noticeable depressing effect on the child, but since its effect gradually wears off after one and a half hours, its field of usefulness does not compete strongly with the other recognized methods of analgesia in the first stage, except in the tumultuous rapidly progressing first

stage of labor, where it is anesthesia par excellence, as the patient goes under its effect during the injection, eliminating the floundering which frequently accompanies the volatile anesthetics in such cases.

The manual or instrumental assistance possible in the first stage of labor is associated with great dangers to mother and child. Prophylactic external version is seldom correctly applied in the first stage of labor, a breech presentation in the normal multipara presents no greater danger to the child in skillful delivery than does external version, and in the primipara with normal child and normal amount of liquor amnii even the expert does not succeed as he does in the seventh and eighth month. Try it if you will, but the pathology which has created the breech position is still present and may indicate podalic version with extraction later. Careful analysis of the case will most frequently dictate a policy of expectancy with deep episiotomy and manual aid and forceps.

A corset of the Spencer pattern is an aid in labor which might be more frequently used to advantage in overdilated abdominal muscles or where the uterine contractions are poor, due to posterior position.

Cervical and vaginal packing with gauze and glycerine are at times justified and are at least harmless in comparison with bougies and colpeurynters, for the latter of which a place still can be found, although it is gradually being eliminated by the success secured by laparotrachelotomy where this can be practiced. The reduced morbidity and low mortality any operator secures with laparotrachelotomy in comparison with his classic sections commends this procedure to all serious surgeons, but the surgical skill and surgical resources which its use calls for are certainly beyond the novice and I would caution anyone contemplating to perform same to deliberate carefully over his qualifications as strongly as I would urge upon the expert surgeon the advantages of this operation over the classic section, especially in all potentially infected cases.

My message relating to the first stage of labor could be summarized in four trite statements:

1. Unbiased analysis of your case.
2. Religious respect for asepsis.
3. Mitigation of suffering always.
4. Formulate a clearly defined course for the second stage.

IMMUNIZATION AGAINST DIPHTHERIA*

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HISTORY OF TOXIN-ANTITOXIN

Toxin-antitoxin has been used in Germany since 1913 when VonBehring demonstrated its

method of preparation and action. About the same time Park and Zingher experimented with it in New York. Since that time it has been used quite extensively in America and Germany. It has been used little in France because of defects.

To prepare toxin-antitoxin, a toxin and antitoxin perfectly stabilized were used. The L+ dose of the toxin was determined and toxin and antitoxin were mixed in proper proportion. Controls on many guinea pigs were done to determine the toxicity of the mixture. The mixture must be so prepared that it will not disintegrate. 3L+ toxin doses have been substituted by 0.1L doses by underneutralized toxin. In this country the toxin-antitoxin used by some manufacturers has been made with antitoxin from sheep and goats.

HISTORY AND PREPARATION OF TOXOID

Ramon¹ in France in 1923 advised the use of an antigen entirely different. He adds 4 c.c. or 0.4 percent of commercial solution of formaldehyde to a freshly filtered liter of diphtheria toxin and incubates the mixture for about four weeks at a temperature 38 to 40 degrees C. The French call this "anatoxin." Several American companies prepare this in a similar manner and call it "toxoid." Loewenstein^{2,3} produced a mixture of diphtheria culture with formaldehyde 0.4 percent and incubated it for three weeks. He found that it loses its toxicity but does not retain its antigenic powers. Now he has prepared an antigen which may be used for human immunization by the method of inunction but not by injection, and this he recommends as harmless and easy to apply.

TESTS OF TOXOID

In the preparation of the anatoxin, Ramon says it must be tested for its intrinsic antigen power, which is measured by its flocculence. The test is made with tubes containing various known amounts of antitoxin units having 1 c.c. of anatoxin added to them. Where flocculation occurs, the value of the anatoxin is ten anatoxic or antigen units.

Innocuousness is tested by injecting 5 to 6 c.c. under the skin of a 300 gm. guinea pig. If no reaction, local or general, occurs within one month showing signs of diphtheria intoxication, the substance may be used.

RESULTS OF TOXOID

During the last school year, 3,764 doses of diphtheria toxoid were given here to 1,363 pupils in the Gary schools. Of this number 436 were Schick retested about three months following their last dose, 342, or 82 percent, showing negative reaction, and 78, or 18 percent, showing positive. Children under eight were given toxoid without first being Schick tested. The Schick test material used was from Parke, Davis & Company and from Squibbs'. The diphtheria toxoid used was from

*Presented before meeting of the Lake County Medical Society, September 12, 1929.

the Connaught Laboratory, Toronto, Canada. The dosage was $\frac{1}{2}$, $\frac{1}{2}$, and 1 c.c., given twenty-one days apart. Primary Schick tests among the school children of all ages show about 50 percent positive. Schick retests after three doses of toxin-antitoxin give 39 percent still positive. After two doses of toxoid 67 percent were negative in retests given in 1928, or 33 percent still positive. Five doses of toxin-antitoxin immunize about the same percentage as three doses of toxoid. Drs. George and Gladys Dick⁴ found in using two commercial preparations of diphtheria toxoid that 92.8 percent was completely immunized by three doses, $\frac{1}{2}$, 1, and $1\frac{1}{2}$ c.c., given fourteen days apart. Ramon gives a three-week interval between first and second doses and fifteen days between second and third. This year we plan to use $\frac{1}{2}$, 1, and $1\frac{1}{2}$ c.c. dosage with a three-week interval. Those under eight years will not be given a primary Schick test. Those over eight will be first Schick tested and those showing a marked pseudo-reaction we shall first attempt to desensitize with small doses of $1/10$ and $2/10$ c.c., one week apart preceding the regular doses. Thus, we hope to have over 90 percent immunized. This year we did toxoid-reaction tests on about one hundred individuals along with their Schick test, but as the results quite closely coincided with the control of the Schick test, these were discontinued.

REACTIONS FROM TOXOID

Only nine general reactions, or 0.24 percent, were reported following the 3,764 doses of diphtheria toxoid doses given this year although there were other slight local reactions with redness, usually less than two sq. cm. at the site of the injection. These reactions lasted from a few hours to four days and consisted of fever up to 101 degrees C., general malaise, headache, nausea, and vomiting. Usually the general reaction was accompanied by a sore, red, swollen arm, more than 2 sq. cm. in size. Thirteen days were missed from schools on account of these doses. Immunization with Ramon anatoxin⁵ has been used sporadically since 1924 in France. Of over 50,000 injections in Paris in October, November, and December, 1928, not a single serious result developed. By April, 1929, no case of diphtheria had developed among the immunized.

COMPARISON OF TOXIN-ANTITOXIN AND TOXOID

Diphtheria toxoid so far has been proven to be more efficacious than toxin-antitoxin in active im-

munization against diphtheria and is recommended for the following reasons:

1. In many preparations of toxin-antitoxin there are serum proteins of horse origin. These are of comparatively small amount, but may possibly be sufficient to render a patient sensitive so that an accident might occur from an injection of horse serum. There is no serum in toxoid so it cannot sensitize a person to any antitoxin or serum.

2. Three doses of toxin-antitoxin immunize about 60 to 70 percent, while three doses of toxoid immunize from 80 to 90 percent. Three doses of toxoid immunize about the same percentage as five doses of toxin-antitoxin.

3. Toxoid is not easily affected by changes of temperature and resists temperature up to 65 degrees C.

4. Toxoid has a stable antigenic power, as shown by flocculation and in immunizations according to Ramon and others. The antigen value of toxin-antitoxin is unknown.

5. Toxoid is more easily prepared than toxin-antitoxin.

6. The time to produce immunity after doses appears to be longer with toxin-antitoxin than with toxoid. It takes three to six months after toxin-antitoxin, while with toxoid immunity usually develops sooner.

7. Toxoid has been rendered non-toxic in its preparation.

8. Very few reactions occur following injections of toxoid. Reactions occur more, apparently, in those who show a pseudo-reaction to the Schick test, that is, those showing a reaction to the intradermal injection of the boiled toxin. This positive control is supposed to be due to sensitization to specific bacterial proteins which act on those who have a peculiar sensitivity to these proteins. These proteins, products of the diphtheria bacilli, may be present likewise in the toxoid. Sensitivity may be present more in those who have had diphtheria or in adults who have been exposed to the Loeffler's bacillus.

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AN UNAPPRECIATED CAUSE OF CHRONIC BRONCHITIS

Following the bronchographic examination of a large number of patients suffering from so-called chronic bronchitis, evidence of bronchial dilatation was found by Alton Ochsner, New Orleans (*Journal A. M. A.*, July 20, 1929), in more than 90 percent of the cases. He says that cases of chronic bronchitis lasting over a period of months or recurrent attacks of acute bronchitis should be given the advantage of a bronchography. The introduc-

tion of iodized oil into the tracheobronchial tree is of distinct therapeutic value not only in those cases of chronic bronchitis and recurrent attacks of acute bronchitis but also in the cases of definite bronchiectasis with large amounts of foul sputum. The method used for introducing the iodized oil into the tracheobronchial tree should be simple; it should not require a great deal of technical skill; it should be easy to carry out, harmless and not unpleasant for the patient. This is best accomplished by the passive technique.

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EDITORIALS

ANESTHESIA FOR TONSIL OPERATIONS

There has been much discussion concerning the advantages of nitrous oxide in tonsil operations, in view of the fact that with nitrous oxide anesthesia the laryngeal reflex is not disturbed and accordingly there is less danger of inhalation pneumonia as a post-operative complication. In discussing this subject it seems to be overlooked by many that ether anesthesia may be carried farther than necessary for tonsil operations, thus paralyzing the laryngeal and pharyngeal reflex, and further, that operating a patient on the side almost wholly lessens the dangers from aspiration pneumonia no matter what anesthetic is used. The criticism concerning tonsil anesthesia as so frequently induced is that anesthetists, sometimes encouraged by the operator, secure profound anesthesia which is entirely unnecessary. Many very skilled and experienced operators prefer that the reflexes be not entirely abolished in tonsil operations, and if to this practice is added the further practice of doing the operation with the patient lying on the side, with head slightly dependent, the dangers of aspiration practically are nil. Furthermore, the operator has an unobstructed view of all the parts and there is no necessity of using an aspirator or suction apparatus.

**SHOULD THE MEDICAL PROFESSION
ADVERTISE?**

The suggestion is offered by the editor of the *Bulletin of the Chicago Medical Society* that the medical profession should advertise in the daily lay press concerning the economic and scientific problems before us, ostensibly with the idea of breaking down the present tendency to establish socialistic medicine or perhaps what may be called commercialistic medicine if carried on by organizations organized for profit. In commenting upon this suggestion the *Chicago Tribune* says that medical men are going back on their long established rule that physicians individually or collectively should not advertise, and are discovering that advertising should not be considered unethical without considering the honesty of the advertising, the

character of the men who use it, and the end for which it is employed.

The unfortunate part of this controversy is that newspaper publishers seem to think that medical services can be placed on a par with merchandise, and that advertising not only helps the seller but enables the public to choose intelligently as to the value of the product. Such reasoning will not stand even superficial analysis, for if the sale of medical and surgical services is to depend to any extent upon advertising, then the poorest trained medical men and the most conscienceless quacks will have the best of the bargain because they will spend more for publicity than any one else, and sometimes specious argument and an abundant display of printer's ink captures the public eye as well as the public purse. Insofar as the public is concerned the result would be exceedingly disastrous when applied to the sale of medical and surgical services. Already the medical profession is advertising in a legitimate and educational way through such means as employed by the Indiana State Medical Association, or Bureaus of Publicity in which much knowledge concerning preventive and curative medicine is given the public. It only remains to go a step further and acquaint the public with means and methods whereby all of the people may receive the best of medical and surgical attention at any and all times without exploiting any individual members of the profession, in order to carry the advertising program as far as it should be carried in the interests of safety. Unfortunately the public, and many lay publishers who are interested in the financial side of the question, do not seem to understand that medical ethics protect the public far more than they protect the medical profession. In fact, if it were not for medical ethics the practice of medicine would be in a very chaotic and exceedingly dangerous condition, and work irreparable harm to the public.

MAKE MORE HEALTH EXAMINATIONS

Prominent lay persons are complaining and offering sharp criticism because medical men individually are not devoting enough attention to health examinations and in particular the pre-school examination of children. The public is beginning to be thoroughly aroused concerning the importance of periodic health examinations and in particular the pre-school examination of children which should be a routine procedure. Unless medical men individually wake up and take an interest in this work they are going to lose out. Why shouldn't physicians urge their patrons to have periodic health examinations? The examinations should be thorough and carefully made. Abnormalities should be pointed out and advice given concerning their correction. Of special importance is the need for pre-school examination of children, with the recommendation that correctible defects

like enlarged tonsils and adenoid tissue, eye defects, and diseased teeth be given appropriate attention. Before attending school the child should be vaccinated for smallpox and given the preventive treatment for diphtheria if it has not been given before. All of this work should be given appropriate attention by the family physician, and he it is who should give the advice to the mothers and fathers rather than have it come from some school physician or school nurse.

MALIGNING CONFRERES

It seems as though every physician, whether he has had any training, experience or natural ability for the work or not, is attempting tonsil and adenoid operations. In consequence there is some bungling, incomplete and in some instances very harmful tonsil and adenoid work done. However, considering the great number of tonsil and adenoid operations that are done in every community it is rather surprising that there are so few really bad results following such interference. The cases in which the pillars or the soft palate are badly mutilated, or in which pieces of tonsil are left on one or both sides are comparatively rare, yet to hear some physicians talk you would think that a successful tonsil and adenoid operation is a rarity. One irregular physician in a leading city in Indiana boldly calls attention in the lay press to the alleged predominance of bad tonsil and adenoid surgery and he gives the impression that he is about the only one who can do a first-class job. It is reported that he delights in telling patients that the tonsil and adenoid operations performed upon them by regular physicians have been unskillfully performed, and that tonsil and adenoid tissue still remain. However, this irregular is not the only one who finds opportunity to unjustly criticize the work of others, for it is the practice of some erstwhile reputable physicians to condemn the work of their confreres when there is a little granulation tissue remaining in the tonsillar space, or a little harmless lymphoid tissue at the base of the tongue. Such a statement may be due to ignorance, but more often it is a vicious statement made for the purpose of injuring a confrere while at the same time securing work and a fee for the traducer. Nothing is more contemptible than for a physician to actually invent evidence that will injure a confrere. However, there is an old saying that "chickens always come home to roost", and it is our opinion that the physician who always is looking for and taking advantage of an opportunity to harm a fellow practitioner will himself meet the same fate sooner or later. One of the finest examples of the spirit of tolerance coupled with a gracious and generous professional spirit that has come to our personal knowledge, was the attitude of a well known surgeon who refrained from letting the family and friends of the patient know that the appendix,

which supposedly had been removed by another surgeon, was not removed, and the circumstances were such that an exposition of the true facts perhaps would have been justified. How different is the case when the evidence is mythical and developed by the covetous and dishonest brain of an unethical physician.

FAIR FEES

An insurance adjuster has asked for a candid opinion concerning the fairness of an extortionate bill presented by a small town surgeon for a comparatively trivial operation. The inquiry was answered by showing an established city fee bill. Later the small town surgeon threatened to sue for his fee, but afterward thought better of the matter and settled for what really was very generous compensation. He then put up a howl about "the brow-beating practices of insurance companies and how they take advantage of the poor down-trodden doctor." The insurance adjuster showed another bill from a small-town surgeon in which not only a simple operation was charged at an extortionate rate, but an additional itemized bill for dressings twice a day was added. Any well trained and experienced surgeon would testify in this latter case that practically all of the dressings were superfluous. These experiences reflect upon the whole medical profession and places us under suspicion of exacting the "pound of flesh" a good deal more than lawyers do, and that is going some. We are well aware of the fact that there is a tendency on the part of insurance adjusters to trim members of the medical profession in the settlement of bills for professional services rendered, but we are beginning to think that they are not the only ones who are doing some trimming. Generally speaking, physicians are altogether too poorly paid, considering the character of services rendered, and we are willing to uphold them in their efforts to seek just remuneration, but we cannot endorse such a species of holdup game as that attempted by the men whose bills for services rendered were given us for opinion.

THE X-RAY AS A DIAGNOSTIC AND THERAPEUTIC AGENT*

It is remarkable how people today recognize the importance of an x-ray examination if there is any pain or swelling in the region of a bone or joint. They were brought to this largely by the simplicity of the idea of the necessity of an x-ray film when a bone is broken. It required some years, however, to impress the medical profession and the people with the same necessity of taking an immediate x-ray film after a slight injury to a bone, called "contusion" or "bump," or a trauma to a joint called a "sprain." Non-medical persons, especially parents, have gone

*Editorial by Joseph Colt Bloodgood, M.D., of Johns Hopkins Clinic, in the September, 1929, number of "Radiology."

farther in their intellectual conception. When one of their children has a pain or a limp or a swelling, they demand an x-ray examination first. The majority of persons today are not content with the diagnosis of "growing pains," "charlie horses," "bumps," sprained ligament, torn muscle, or the most dangerous diagnosis, "rheumatism." They demand an x-ray examination. This has already, since 1920, increased the cures of cancer (sarcoma) of bone from less than 4 percent to more than 30 percent. So ignorant were the people of the value of an x-ray diagnosis that no child or adult was cured of a sarcoma of bone in the Johns Hopkins Clinic until 1913. By 1921 we had cured but 4 percent; by 1929, 30 percent. Education and the x-ray accomplished this.

The early examination of a bone or joint has tremendously reduced the crippling of children. The new knowledge of essential foods, milk, cod liver oil, fruit juices, green vegetables, and sunlight has wiped out rickets, with its deformity of bones. How fortunate for the female of the race that bowlegs and knock-knees and bending tibias and deformed ankles were prevented before the age of short skirts! The crippling due to tuberculosis of joints has been largely wiped out by better and pasteurized milk; osteomyelitis of bone by cleaner milk and water and the earlier removal of tonsils and adenoids in children, and the better care of the teeth, and the wiping out of typhoid fever. And the earlier application of the x-ray has increased the cures of cancer of bone and reveals the non-cancerous tumors of bone so early that they can be cured without crippling. This progress in the earlier recognition of diseases of bone and in the prevention of many of the diseases of bones and joints must be looked upon as a remarkable achievement since 1900, as great an achievement as the wireless and flying machine.

The medical and dental professions and the people have not grasped the protective value of x-ray films of the teeth as they have x-ray films of the bones or joints. I think it may be safely said that the most neglected focus of infection which is dangerous to both child and adult is a root abscess. X-ray films of the teeth should be made periodically—one should not wait for symptoms, especially when the gums begin to recede and there are many fillings or much bridgework. I am inclined to the opinion that periodic examinations are as valuable as life insurance, perhaps more so. Life insurance would increase in value if its first examination was more thorough and it insisted upon annual examinations as well as on premium payments.

The public and the medical profession have failed chiefly in recognizing the protection of an x-ray study of the stomach the moment there are any warning symptoms from within the abdomen. The operation for cancer of the stomach (resec-

tion) was marvelously planned and executed in 1884 by Billroth, a surgeon in Vienna. In spite of this, in the Johns Hopkins Clinic from 1890 to 1915 the actual percentage of cures of cancer of the stomach was less than two, which was ten percent of those cases in which the operation could be performed. In ninety percent of the cases the individual came into the clinic in a hopeless stage of cancer of the stomach. In spite of the wonderful diagnostic value of the fluoroscope and x-ray film in diseases of the stomach, the percentage of inoperability in 1928, in all great clinics of the world, has been reduced only from ninety to sixty percent, and the permanent cures after resection have been increased from ten to thirty percent.

Most persons today, if they think they have heart disease, go to their doctor and say: "Please listen to my heart." But very few who have indigestion or any unusual symptoms from the abdomen, go to their doctor and request an x-ray examination of the stomach. X-ray study has a wider application in the recognition of organic disease than any other diagnostic test. Improvement can be made only through its earlier application.

There is room for one other important statement in regard to the x-ray. This and radium are valuable therapeutic agents in treating tumors and malignant disease. Everyone knows what a "lump" is. Human beings usually feel a lump when it is smaller than a bean. Unless properly informed they pay no attention to a lump unless it grows rapidly or gives pain. Every individual who feels a lump, no matter where the lump may be, or whether he feels one or more lumps, should seek examination by a physician at once. The medical profession is now learning that if the lump is growing rapidly, it should be removed at once, unless it is situated near a great nerve or vessel. Then, before removing the lump, it should be treated with x-ray or radium radiation. A certain number of lumps are radiosensitive and growth in them can be prevented by radiation. Thousands of lives can be saved by instructing the public to seek an examination the moment they feel a lump and by teaching the medical profession throughout the country the best method of diagnosis and treatment.

Practically every locality in the United States has a modern x-ray apparatus and one trained in its use within easy walking, automobile, or railroad journey. A like uniform distribution of adequate amounts of radium has not yet been accomplished, although there is sufficient radium in the world to make such a distribution possible. It is my opinion that this progressive movement is near at hand, and every locality will have available everything that is necessary for the recognition and treatment of cancer in all stages. The medical and dental professions recognize that they must prepare themselves for the demands of an enlightened public, and the public in this country

is amply able in its prosperity to finance its health protection just as well as its protection from fire.

EDITORIAL NOTES

DEAR DOCTOR.

THE JOURNAL and the Cooperative Medical Advertising Bureau of Chicago maintain a Service Department to answer inquiries from you about pharmaceuticals, surgical instruments and other manufactured products, such as soaps, clothing, automobiles, etc., which you may need in your home, office, sanitarium or hospital. We invite and urge you to use this Service.

It is absolutely free to you.

The Cooperative Bureau is equipped with catalogues and price lists of manufacturers, and can supply you information by return mail.

Perhaps you want a certain kind of instrument which is not advertised in THE JOURNAL, and do not know where to secure it; or do not know where to obtain some automobile supplies you need. This Service Bureau will give you the information.

Whenever possible, the goods will be advertised in our pages; but if they are not, we urge you to ask THE JOURNAL about them, or write direct to the Cooperative Medical Advertising Bureau, 535 N. Dearborn St., Chicago, Illinois.

We want THE JOURNAL to serve you.

PAY your 1930 medical society dues NOW.

THE JOURNAL wishes all of its readers a Merry Christmas and a Happy New Year.

DON'T wait to be asked to pay your medical society dues. Pay them now.

THIS number of THE JOURNAL contains the index for the year. Use it in binding your journals.

CARBON dioxide should be found in every hospital as it is invaluable in the treatment of persons poisoned from anesthetics, narcotics, and alcohol.

IN the January issue of THE JOURNAL will be found a list of officers and committees for the year 1930. We shall be obliged if any of the readers of THE JOURNAL will call our attention to errors in initials, names or addresses.

MRS. A. C. McDONALD, wife of Dr. A. C. McDonald, of Warsaw, president of the Indiana State Medical Association, died November 27. The sympathy of the medical profession of the state goes to Dr. McDonald in his bereavement.

THE members of our Association will be interested in the opinion of our attorney concerning the fees payable under the law to physicians in insanity inquests. The opinion is published in the Society Proceedings Department (Report of Executive Committee) in this issue of THE JOURNAL.

BEWARE of the paid solicitor for anything of a benevolent or charitable character. If you desire to help any cause, then pay your money direct to the cause and not to a solicitor who gets the lion's share as compensation for his work, and make sure that he doesn't get anything out of the donation that you send direct.

THE *Bulletin of the Chicago Medical Society* says that a new food questionnaire is out and the waste basket is the safest place for such inquiry. Amen and amen! To answer the average questionnaire is like giving a testimonial letter. In either case the opinion secured as a usual thing is used for advertising purposes.

WE have received circulars inferring that it is easy to collect money by mail and offering, at a stipulated price, to tell us how to do it. In fact if we were inclined to send the remittance requested we certainly would prove that it is easy to collect money by mail. We hope that none of our confreres are biting at the bait thrown out and proving the statement made.

THE new anesthetic gas known as cyclopropane is gaining in popularity, though considered to be in the experimental stage. It may be given with a large percentage of oxygen, and when so given is considered an extremely safe anesthetic. Recovery from the anesthesia is rapid, and apparently there are no after-effects of any kind whatsoever.

FORT WAYNE has a mild epidemic of smallpox. Some of the schools are closed until all the pupils can be vaccinated. Recently it was noted in the daily newspapers that one of the schools would reopen without requiring the pupils to submit to vaccination. Did the Christian Scientists have any influence in bringing about leniency in permitting unvaccinated children to return to the public schools?

BURTON D. MYERS, M.D., Dean of the Indiana University School of Medicine at Bloomington, is the president of the Association of American Medical Colleges, and as such delivered an address at the annual session held in New York City early in November. The medical profession of Indiana is proud of its University Medical School and the character of work that is being done, as it also is proud of the officers of the school who rank high among educators.

VIOSTEROL is the name given by the Council on Pharmacy and Chemistry of the American Medical Association to irradiated ergosterol or cod liver oil. Dentists, and particularly some in Indiana, will not like the statement made in the *Journal of the A. M. A.*, of August 31, to the effect that irradiated cod liver oil is not useful in the prevention of dental caries. The main etiological factor in dental caries is not rickets, and therefore caries will not be eradicated by any anti-rachitic agent however potent.

AGAIN the medical profession is flooded with circulars promising all sorts of fine results in the

prevention of colds and catarrhal complications of the respiratory tract if influenza or cold vaccine is used as a preventive. Well, we believe that every intelligent physician who has tried vaccines for colds will say that the whole vaccine proposition is about a fifty-fifty shot, and even in the favorable cases it is a hard matter to decide definitely whether the alleged immunity has been caused by the vaccine or is a mere coincidence.

AT this time of the year, when the spirit of giving seems to affect all of us, we desire to express our thanks to all contributors, advertisers, assistants and all those who have aided in making THE JOURNAL what it is insofar as merit is concerned. Our especial thanks go out to the printers and all those connected with them in the mechanical makeup of THE JOURNAL. They have been accommodating, courteous, and fair, and the quality of their work speaks for itself. Without their hearty co-operation our burdens would be greater.

Again we desire to remind the readers of THE JOURNAL that we are anxious to secure news notes and personals from every county in the state. The secretaries of county medical societies are supposed to be correspondents of THE JOURNAL but we confess with some disappointment that we seldom hear from them. We also wish to announce that our Correspondence Department is an open forum for the discussion of any subjects which are of interest to the medical profession of the state. Let us have constructive criticisms that are of especial value to the profession.

IN advertising physical therapy courses, why is it necessary to emphasize the commercial advantages of being familiar with physical therapy? Why not say something about the real therapeutic value of certain forms of physical therapy, and why not frankly admit that it has a limited field of usefulness? All of these chaps who are running over the country giving physical therapy lectures desire to sell their wares to the members of the medical profession, and to do so they evidently think that what appeals to the average doctor is a get-rich-quick scheme. Perhaps they are right.

"I BELIEVE that the financial burden of sickness on the common man, so far as hospital and nursing care is concerned, could be greatly reduced by properly planned and equipped hospitals, by introducing economical methods of caring for patients, and by compelling the proper authorities to pay for the care of the charity and poor patients unable to meet the expense. The municipality or county authorities should not sponge off funds from the charitable minded or add to the burden of the sick, already overtaxed." *W. J. Mayo, at the Clinical Congress in Chicago, October, 1929.*

A FEW years ago it cost an Indiana physician nearly \$1,500 to defend successfully a malpractice suit against him. *He had failed to pay his medical society dues on time*, otherwise the expense of his malpractice suit would have been borne by the Indiana State Medical Association. Don't let such an experience happen to you. Remember that if you are delinquent for but one day, that may be the very day when you render services that may be the basis for a malpractice suit which you will be called upon to defend, and even though you win it may cost you hundreds of dollars. It is better to be safe than sorry!

DEAR, dear! After all we have said about patronizing collection agencies we hear that a few physicians in Indiana vainly are trying to get an accounting from agencies that actually have collected money for which they have made no return. As we often have said, we do not believe there is one collection agency out of a hundred dealing with physicians' accounts that can be considered absolutely trustworthy. Why not do your own collecting? If it is necessary, employ someone in your community whose trustworthiness is known to you. You will be ahead in the long run, and in addition a better taste will be left in the mouths of your patrons.

AT the recent session of the state medical secretaries and editors, held in Chicago in November, Dr. Olin West, secretary of the American Medical Association, was presented with a beautiful watch and chain as an evidence of appreciation of his courtesy and helpfulness in a variety of ways in conducting the affairs of state medical associations. It was a fitting gift to a man who has done so much constructive work for all regular medical organizations. Dr. West is a very capable, very efficient, and very gracious officer, and it is well that such men occasionally receive something more than a formal "thank you" for what they are doing for others.

WE are much in sympathy with the suggestion that has been offered to the effect that the Indiana State Medical Association ought to have a committee or council that will cooperate with the Indiana State Board of Health in all matters pertaining to the health of the people of the state. At present there is lack of cooperation as well as co-ordination of effort in all that goes toward health preservation. If we have such a committee then let it be an active one, and not a mere figurehead. We are inclined to believe that the members of the State Board of Health will welcome the suggestions and recommendations of the Indiana State Medical Association.

THE editor of the *Medical Mentor* for October says that too many men with little experience are

plagiarists in that they are writing articles from textbooks. Too many men rich in experience are keeping silent. If the first would keep silent and the others speak out, how vastly benefitted would be the profession and the patient. To which we say "Amen". We confess that we have published in *THE JOURNAL* on one or two occasions in the past a so-called original article that was stolen word for word and punctuation for punctuation directly from some text book. The plagiarists are not all dead or sleeping, but editors can make it uncomfortable for them if the stolen articles are refused publication or due credit given for the source of material.

BETWEEN four thousand and six thousand physicians in Chicago are contributing six million dollars in charity work each year, and this should be taken into account by the profession and the public at large, according to the *Bulletin of the Chicago Medical Society*. What is occurring in Chicago is occurring in every populous community, and yet this free medical work receives scant recognition. We often think of this when solicitors ask physicians for contributions to community chests or benevolent work of one kind or another. Few if any people in any walk of life outside of the medical profession do any great amount of charity work, and yet physicians are sometimes called tightwads if they refuse to give any more than a nominal sum to a charity fund.

We had supposed that the disastrous fire in Cleveland, originating in a room where x-ray films were stored, was sufficient to cause every hospital in the world to take necessary precautions to store x-ray films in fire-proof vaults or in a place where under no circumstances they could be dangerous to life or property. However, some people do not learn by experience or example, and recently the daily papers tell of a fire in a San Francisco hospital, originating in the x-ray room, which, had it not been for the heroic action of doctors and nurses in rapidly removing the inmates of the hospital, would have resulted in a terrible loss of life. Perhaps a few laws with teeth in them will be necessary to bring hospital managements to their senses after having such an example as that in Cleveland.

OCCASIONALLY we receive a copy of a periodical called *The Journal of the Association for Medical Physical Research*, which in our judgment is circulating some vicious teachings concerning the cause and cure of disease. We especially have in mind diphtheria, for which the disciples of medical and physical research are offering treatment that is generally untried and generally unproven as to results, instead of resorting to antitoxin. There ought to be some legal means of retaliating when a physician openly is charged with murder in con-

nection with his administration of antitoxin to diphtheria patients. Essentially such a charge was made in a recent number of the periodical mentioned. Some punishment should be meted out to those who make charges of criminality without the slightest foundation in fact for them.

WE hear much about medical advertising, and at the present time the lay press has much to say on the subject of selling health through appropriate advertising that the regular medical profession should sponsor. Commenting on this subject, the *Nassau Medical News* says, "Health can be sold and health can be made an article of popular appeal. When the medical profession, the health departments, and agencies take a leaf out of the books of our commercial friends, we can sell health and sell it in large doses. We must dress up our package, revise our publicity copy, and employ more attractive advertising media. If we do this we need have no concern about the price-cutting competition of the cultists, the faddists or the uplifters. Ours is a legitimate product and if properly marketed will bring its own price."

THE editor of *THE JOURNAL* does not know whether to be flattered or peeved when asked to be one of ten men to contribute twenty-five thousand dollars in cash as an endowment for a specific purpose in an educational institution that requires more funds for development. Just why it should be thought that any physician would be able to give away twenty-five thousand dollars is more than we can understand unless the said physician has inherited money, been exceedingly fortunate in investments, or has robbed a bank, and we deny having acquired a competence in any of the ways mentioned. To tell the truth we are just a few steps ahead of our creditors, and when we get enough ahead so that we can donate twenty-five thousand dollars to anything, we believe we will start a fund to help struggling young physicians.

"Now is the time to invest in good securities" is the statement made by glib salesmen who are soliciting by telephone and personal calls, and physicians are rated as good prospective customers. A word of warning is necessary. If you have any intention or desire of investing then ask your bank to make some investigation as to the value of the securities offered. No stock or bond is worth considering unless it is accepted as collateral for loans in banks, has a market value if you desire to sell it, and has paid interest or dividend. Don't be misled by the cheerful information that your investment is speculative, with "great chances of making enormous profit." No physician has any right to take speculative chances unless he can afford to lose and not feel it. A safe investment recommended by your bank, with reasonable re-

turn upon the investment, is better than anything else for the average doctor.

If the reports of intelligent parents can be believed, an eye specialist consulted concerning a bad case of squint in a child three years of age, gave it as his opinion that the child would outgrow the trouble and that no attention was required. Another eye specialist determined by retinoscopy that the child had a static error of refraction amounting to more than four diopters of hypermetropia. To advise the parents that a squinting child having that amount of refractive error will outgrow the squint or cross eyes and therefore needs no attention is offering vicious advice and discredits any physician who gives such advice. Non-paralytic squint or cross eyes should be given appropriate attention as soon as discovered, and that does not mean telling the parents that the child will outgrow the trouble, but it does mean glasses to correct the error of refraction which causes the squint, and perhaps appropriate eye muscle exercises.

It is surprising how many physicians are dead from the neck up. Many medical men who graduated years ago have attended few, if any, medical society meetings, bought any new books, or read any of the leading medical publications. They are dying of dry rot, and some of them don't know it. They whine because they do not have much practice and what they do have is among an ignorant type of people who do not discriminate between physicians of good and poor training. It will be a good thing for their communities when those mossbacks die off and their places are taken by the newer generation of physicians. Sometimes we wonder if these old fogies are as harmful as some of the young physicians fresh from college who think they know it all, are possessed with elastic consciences, and tackle anything that comes their way. They seem to forget the old saying, "Fools rush in where angels fear to tread." We cannot chloroform them, but they deserve it.

It is a lamentable fact that Indiana is about the only state in the Union where alcoholic beverages for medicinal purposes can not be obtained on the prescription of a reputable physician. In reality it is an unfair discrimination, but such a condition has been brought about through action of the Indiana legislature, though it does seem a pity that the reputable medical men of the state cannot have at least the same privileges as accorded to medical men in adjoining states. There may be a difference of opinion concerning the efficacy and value of alcoholic beverages as medicinal agents, but so is there a difference of opinion concerning many therapeutic measures, even concerning remedies of such proved value as antitoxin for diphtheria, or vaccination for prevention of smallpox. We be-

lieve in prohibition in the sense of preventing the abuse of anything, but we do not believe in the kind of radical prohibition that has been brought about by fanatical regulations that are inimical to the best interests of society.

RECENTLY an article sent out by the Bureau of Publicity of the Indiana State Medical Association, for publication in the lay press, was changed in its wording by someone connected with one of the prominent newspapers of the state so that the article lost some of its meaning. We have no means of knowing just how the distortion was brought about, but we have a sneaking suspicion that someone opposed to regular medicine was responsible for the deal. As an instance of what *may* happen, we can refer to the advertising and publicity given a medical meeting, open to the public, in Fort Wayne a few years ago, and the contemptible trick of an employee (a Christian Scientist) of one of the newspapers who re-edited the copy submitted to the typsetters in such a way that it was meaningless or contradictory, and it was published in that way. We suggest to the Bureau of Publicity that in sending out articles to the lay press a polite request be made that the articles be printed as presented or not printed at all.

IN this number of THE JOURNAL we are publishing the opinion of the attorney for our Association (Medico-Legal Department) to the effect that the action at the Evansville session with the intent to give the State Board of Health regular representation in the House of Delegates is unconstitutional. The attorney suggests that for the present representatives from the State Board of Health be given the privileges of the floor in the House of Delegates, but no right to vote until duly qualified through election following an amendment to the constitution which would permit such action. Representatives of the State Board of Health never have been denied the privilege of the floor in the House of Delegates, though it is quite possible that at the next session of the Association the matter will be placed in a more definite form by a motion granting a representative from the State Board of Health the privilege of meeting with the House of Delegates and discussing such matters as pertain to public health matters, but with no right to vote.

IN Chicago a small girl accidentally swallowed a nickel which became lodged in the esophagus. Newspaper reports say that the physician attempted to crowd the nickel down into the stomach but was unsuccessful and the patient died. This occurred in Chicago, according to newspaper reports, and we know that in that city are a number of very well-trained and experienced endoscopists who could have obtained that nickel from the

child's esophagus in a few minutes by means of esophagoscopy, and the child would have made a perfect recovery. Certainly there is room for some education of physicians who still resort to the old time bungling methods of attempting to crowd into the stomach foreign bodies that have become lodged in the esophagus, or who try to remove foreign bodies from the trachea or lungs by an external operation. However, the size of the city together with its reputation for the possession of skilled surgeons does not preclude the possibility of that city also having the usual quota of medical dumbbells!

A MEMBER of the staff of the Mayo Clinic reports in the proceedings of the staff meetings, a case of digitalis delirium with colored vision. The patient had taken tincture of digitalis, fifty drops three times a day for three days, then fifteen drops three times a day for seven days, then increased to twenty-five drops three times a day for two days, and then to thirty-five drops three times a day for two days. In all the patient had taken about forty cc. of tincture of digitalis in a period of two weeks. Delirium with colored vision showed up about three days after taking the digitalis. The condition continued for twelve days after omitting the digitalis. In commenting on the case he said that digitalis delirium usually clears up in five or six days. The condition is not common, but it does occur and usually is serious. It should be looked for in patients who are taking digitalis in whom any toxic manifestations develop. It may occur without the other manifestations of poisoning from digitalis, such as nausea, vomiting and disturbances of conduction.

WE believe that boards of health sometimes strain at a gnat and swallow a camel in connection with the reporting of communicable diseases as well as following rules for quarantine. We have no respect for a rule that requires the reporting of tuberculosis on suspicion, or, in other words, before the diagnosis has been made. Neither have we any respect for a rule that holds the consultant rather than the attending physicians responsible for reporting communicable diseases. We admit that enough trouble is caused through failure to report diagnosed communicable diseases so that health authorities can deal with the situation intelligently, but there is no consistent reason for demanding the reporting of cases in which tuberculosis is only suspected. That would keep not only the physicians but the boards of health busy in recording cases that never should be recorded. If a physician has any suspicion that a patient has a communicable disease he certainly has sense enough to see that proper precautions are observed until a definite diagnosis is made. In the meantime it is a piece of meddlesome officiousness to

demand that physicians report cases in which diagnosis has not been made.

WE hold no brief for Dr. Louis Schmidt, of Chicago, who was ousted from the Chicago Medical Society and hence from all of the parent medical associations because of alleged unethical conduct in connection with the advertising of a clinic, but we do think that it ill becomes the *Illinois Medical Journal* to jump on Dr. Schmidt for unethical advertising when that journal is so inconsistent in its own advertising policy. For instance, according to our count, the November issue of the *Illinois Medical Journal* contains nine and one-quarter pages of unethical advertising in the front section, and five and one-quarter pages of advertising in the back section which would not be accepted by the *Journal of the A. M. A.* or any one of thirty state medical society journals. In other words there are fourteen and one-half pages of objectionable advertising in the *Illinois Medical Journal*, and yet that journal lambasts Dr. Louis Schmidt for unethical advertising. We are not defending Dr. Schmidt to the slightest extent, but we do feel that his conduct so far as advertising is concerned is no worse than that of the *Illinois Medical Journal*. There is an old saying that those who live in glass houses should not throw stones.

ACCORDING to circulars received, the more or less notorious Macfadden, of *Physical Culture* fame, now has a confidential medical assistant who signs "M. D." after his name. Anyway, including a lot of "applesauce" concerning Macfadden as a great scientist, health expert and confidante, a suggestive and personal invitation is given to a large number of people to unburden to Macfadden, in an intimate way, their innermost secrets of life. The invitation says, "There are literally thousands of questions which false modesty keeps you from asking your doctor. Thousands of things that you should know about yourself that prudery today is withholding from you, and it is these things, pure in themselves and often surrounded by a veil of mystery, which is causing today's great curse of disease." Presumably Macfadden, perhaps with the assistance of his confidential medical assistant, the latter probably employed to avoid embarrassment if Macfadden runs counter of medical laws, is to furnish this intimate and private advice for two years for the sum of four dollars, and the *Physical Culture* magazine will be thrown in for good measure. Macfadden has a really nice game and he plays it well—in the interest of Macfadden.

"THE outstanding ethical challenge that faces the medical profession today is one of common honesty. It is this: Shall we cheat our patients and encourage unnecessary operations by splitting fees?" Such is the statement of Dr. Richard

C. Cabot, of Boston, in the August number of *Colorado Medicine*. He goes on to say that the worst part of this nefarious business is that the public cannot tell a fee splitter from an honest man, nor a fake diagnosis from a true one. It harms the physician, or it takes some of the numerous forms which is covered up by one or another of the current devices such as having the physicians assist at the operation. Perhaps the worst of fee splitting is not the loss of money to the patient, but the encouragement to the performance of unnecessary operations with the inevitable percentage of fatal results, the removal of normal appendices for chronic appendicitis, and of normal gall bladders for chronic cholecystitis. Dr. Cabot says that "the remedy for this condition of affairs is in the growth of intellectual integrity in the medical profession as a whole, a growth that may be favored by a sense of chronic discomfort in living the life of a liar and a thief." Strong language for a man prominent in the medical profession, but true nevertheless.

WE again call the attention of our readers to the controversy over the kind of propaganda that is issued to the laity in behalf of the Riley Hospital in Indianapolis. It is said that welfare nurses are going into the different counties in the state and attempting to work up enthusiasm for the Riley Hospital by pointing out the high quality and comprehensiveness of the work done at the hospital, and the ease with which the services may be secured by all classes of people. The bulletins of the hospital have contained a mixture of sob-stuff and veiled invitations to people to take children to the hospital, with the intimation that the service is so much better than that received at home, and all in all the whole program seems to have rubbed the fur the wrong way in the medical profession of the state. The fact that the hospital apparently is taking patients that are not indigent, or who have been committed to the hospital in an irregular way, has not tended to make the medical profession especially enthusiastic concerning the hospital. The medical men of Indiana do not object to the existence of the Riley Hospital, and are quite willing to endorse the enterprise as not only worthy of support but capable of giving very trustworthy service, but it is argued, and justly so, that the Riley Hospital, founded and maintained for the care of the poor and indigent,

should be used for such purposes, and the admission of patients in every instance be in accordance with the rules and regulations laid down for admission. There is no excuse for pauperizing the people by giving gratuitous services to those able to pay, or increasing the burden of taxation of the people of Indiana to keep up an institution that is rendering gratuitous services for the unworthy. The fact that such an institution offers competition to a medical man who has a right to live, is beside the question.

THE president of the University of Wisconsin, speaking before the American College of Surgeons in Chicago last month, says that with a billion dollars a year at stake state medicine or its equivalent, directed by industries and insurance companies, inevitably will come in the United States unless physicians forestall it by some adequate action of their own. If the private practice of medicine is to be retained then statesmanship must be displayed by the medical profession during the years immediately ahead of us. Preventive medicine is the medicine of the future. The average American of the future will look to his physician for the preservation of health rather than for the cure of disease. President Frank then says, "If the medical profession does not meet these issues and lead and administer the coming transformation, then medical practice will be dominated and controlled by industries, insurance companies, and governments, for the fact remains that there is a growing determination to rid society of the waste of inefficiency due to disease, and this determination is one of the social passions of the period. This determination is heading up into certain very definite public and quasi-public movements that have intimate implications for the medical profession. The economic loss from preventable disease and post sickness death reaches a total of \$1,800,000,000 (one billion eight hundred million dollars) annually as borne by the gainfully employed people in the United States. Labor, industry and the insurance companies are interested in effecting a reduction which it is estimated could be at least half of the present expense. If the private practice of medicine is to survive, then medical men individually and collectively will be obliged to enter wholeheartedly into some scheme where not only the prevention of sickness but reduction in present expense of sickness is considered."

SECRETARIES' DEPARTMENT

It will soon be our duty to collect dues again, and to elect new officers for the different county societies. In some societies the secretary will be re-elected, in others, new ones. Thanks to the ones going out of office for the work they have done in 1929. To the new ones: I welcome you to the arduous duties of collecting dues, getting up programmes and keeping peace and good will in your respective societies. It's a job.

Some societies will be having their annual meeting—eats, talks and fun. The Vigo County Society will hold its annual frolic on January 7, 1930, 6:30 P. M., at the Elks Club, Terre Haute. At this time a new king will be born. Everybody welcome; come and have a good time. I hope every society in the state will have as much fun as they do.

I see in *THE JOURNAL* several of the county societies are having some good meetings.

Remember always to consult your banker about investments. I heard of one doctor that lost in the stock market. He is now practicing medicine again. Also be sure to read the Medico-Legal Department in *THE JOURNAL*.

Why not have *THE JOURNAL* establish a financial department in *THE JOURNAL*? It would help doctors make better, saner and surer investments. Then old age and vacations would cause no worries. It would also take the doctors out of the sucker class.

Sorry to read about the explosion in the x-ray department of the University of California Hospital. Do you use safety films in your work?

Perhaps the following by Grove Patterson will be of interest. I hope so.

THE CHEERFUL DOCTOR

"There are perhaps some things the layman can tell the doctor, though they are such obvious things the doctor perhaps knows them already. The average man or woman wants the doctor to be cheerful, to reduce shock by conversation, to make the patient think he is better than he is and finally to tell him he is going to get well in such a convincing manner that the doctor will be believed. Now this may be all bad. Perhaps the patient ought to be scared. The writer of this column doesn't know the physician's business.

"But at least one might as well be frank about the layman's position and set it forth for what it is worth. If the doctor is not impressed by it, that's his own loss. And it is a considerable loss—of business. The cheerful doctor, unless he acquires an outstanding reputation as a specialist, is going to get the business while the over-serious, sad, and depressing physician is not going to be called again. All this, of course, does not count for hypochondriacs and others who like to be sick or to think they are sick or to be told they are sick."

Now all the doctors can be cheerful beginning with the New Year.

Don't forget the Secretaries' meeting in the spring at Chicago.

Merry Christmas and Happy New Year to all!

A. M. MITCHELL, M.D.

Secretary.

MEDICO-LEGAL DEPARTMENT

ALBERT STUMP

ATTORNEY FOR THE ASSOCIATION

INDIANAPOLIS

The following resolution which had been presented to the House of Delegates in the meeting in Evansville was referred to the Legal Department:

"WHEREAS under the present Statutes of Indiana, and the Regulations of the State Board of Accounts of the State of Indiana, it appears to be impossible for physicians to receive more than Three (\$3.00) Dollars for their services in insanity inquests, as prescribed by the Statutes of Indiana, in cases in which persons are examined to determine whether or not they are fit subjects for treatment in an insane hospital; and,

"WHEREAS the said sum of Three (\$3.00) Dollars is wholly inadequate as compensation for the services necessarily performed by a physician in such a proceeding; so inadequate, in fact, that many physicians throughout the state are refusing to act in the capacity of examining physician in such cases;

"NOW, THEREFORE, BE IT RESOLVED That the Legislative Committee of the Association be and it is hereby instructed to take this matter up with the next session of the State Legislature, with a view to amending the law, so as to provide some method by which physicians serving in the capacity of Examining Physician in insanity inquests may receive reasonable compensation for the services actually rendered in such inquests.

"Recommend be referred to Legal Department of the Legislative Committee.

(Signed) T. Z. BALL,

(Signed) H. H. WHEELER.

Upon my investigation of the matters covered by the resolution I submitted the following report:

"October 31, 1929.

"Indiana State Medical Association,
Hume-Mansur Bldg.,
Indianapolis.

Gentlemen:

"I have the following report to make on the resolution which you have referred to me concerning fees payable under the law to physicians in insanity inquests.

"The law provides that the statement alleging the insanity of any person must be accompanied by the statement of a reputable physician that he has examined the person alleged to be insane and

setting forth certain facts that may be required by the Board of Trustees of the hospital to which the person, if adjudged insane, will be committed. This physician making the statement accompanying the allegation of insanity, under the law is entitled to receive \$3.00 for his services in making the examination and the statement. This fee is payable out of the County Treasury. As to this physician, he may be the regular family physician. He would be entitled, of course, to charge those responsible for the care of the allegedly insane a professional fee for his services in making the examination. That amount would be a matter within the discretion of the physician and the parties from whom the professional fee would be collected.

"As a matter of policy and not involving any legal questions, it would seem to me that the physician who renders this first service already occupies such a position with the family of the allegedly insane that he might reasonably expect fair compensation for his services. Further legislation affecting his fees would not seem to me advisable, in view of the situation he already occupies and the burden the obtaining of such legislation would cast upon the Association.

"In addition to the services of this first physician who makes the statement accompanying the allegation of insanity, two other physicians must 'examine carefully and separately the person who is alleged to be insane and certify their reports separately to the judge of the Circuit or Superior Court having jurisdiction of such case'. These two physicians are appointed by the judge. The first physician is not appointed by the judge. He is employed by those responsible for the care of the allegedly insane.

"In my opinion the two appointed by the judge need not accept the appointment nor serve under it. From the nature of the law if they do accept the appointment and serve, they serve as expert witnesses. The written reports which they make, it seems to me, must be regarded merely as expert evidence. The judge is not authorized to determine whether the person alleged to be insane is in fact insane, merely on the statements made by the physicians. He is required, under the law, to have a hearing and may subpoena the medical examiners to testify further in such hearing. The calling of the medical examiners as witnesses in the hearing is discretionary with the court. These two medical examiners appointed by the court are entitled to pay at the rate of \$3.00 per day 'for making out the certificate and attending the hearing'. Thus if the certificate and the hearing are both had on the same day the examining physicians can obtain but \$3.00 each for their services from the County Treasurer. But if the hearing is not on the same day as the making out of the certificate the examining physicians appointed by the court could obtain \$3.00 each for making the

certificates and \$3.00 per day for attending at the hearing.

"Inasmuch as the examining physicians can not, in my opinion, be compelled to serve and make the examination and certificates, they could not be compelled either to be witnesses at the hearing as examining physicians. It has been definitely decided in *Buckman vs. State*, and *Dills vs. State*, that a physician may lawfully be paid fees for his professional services as an expert witness. This brings us to the conclusion that the examining physicians may refuse to serve under the appointment of the court, unless they have been paid adequate fee for their services. The amount of that fee would be a matter of contract, express or implied, between the physicians so appointed and those responsible for the care of the allegedly insane. In arriving at what a reasonable professional fee for such services would be, the parties interested would occupy the same position with respect to each other and with respect to the fee chargeable against the county as would be occupied by them as expert witnesses in any other case. That is, the fact that the physician obtained the \$3.00 per day allowed him by the law from the county would not of itself prevent his obtaining pay for his professional services from those responsible for the allegedly insane, if the physician had made such a contract, either express or implied.

"The question of policy in regard to the fees for the examining physician is one concerning which I would be in no better position to express an opinion than the members of the Legislative Committee or other members of your Association. Volunteering, however, the expression of my reaction to this suggestion in the resolution, in view of the rights as they already exist, which the physician has in these insanity inquests, it seems to me that there is not enough at stake to justify the effort that would be necessary to change the law.

Respectfully submitted,
(Signed) ALBERT STUMP."

The foregoing will serve to acquaint the profession with my views on the situation created by the law in regard to physicians' pay in insanity inquests. In volunteering an expression of my judgment on the question of policy, I realize that I do so without any very complete information as to the amount of such work the physician may be called upon to do and the conditions of the families in which such work may be required.

DEATH NOTES

DAVID B. DAVIS, M.D., of Thorntown, died November 9th, aged ninety years.

THEODORE J. MARTIN, M.D., of Palmyra, died October 24, aged sixty-eight years. Doctor Martin had retired from the active practice of

medicine. He graduated from the Physio-Medical College of Indiana, Indianapolis, in 1885.

CYRUS W. CAMPBELL, M.D., of Hammond, died October 21, aged seventy-nine years. Doctor Campbell was a member of the Lake County Medical Society, the Indiana State Medical Association and the American Medical Association. He graduated from the Medical College of Indiana, Indianapolis in 1888.

NOAH ADAIR, M.D., of Indianapolis, died October 19th, aged sixty-one years. Doctor Adair graduated from the Kentucky School of Medicine, Louisville, in 1894. He was a member of the Marion County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association.

JOHN M. WAMPLER, M.D., of Richmond, died October 29th, aged seventy-five years. Doctor Wampler had recently retired from the practice of medicine. He was a member of the Wayne-Union County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Miami Medical College, Cincinnati, in 1897.

L. M. ROWE, M.D., of Indianapolis, died October 1, aged sixty-eight years. Doctor Rowe had retired from the active practice of medicine, after practicing for more than forty-five years. He was a member of the Marion County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the Medical College of Indiana, in 1882.

LUTHER P. LUCKETT, M.D., of Terre Haute, aged sixty-five years, died November 12th, following a heart attack. Doctor Lockett had practiced medicine in Terre Haute for more than thirty years. He was a member of the Vigo County Medical Society, the Indiana State Medical Association and a Fellow of the American Medical Association. He graduated from the University of Louisville School of Medicine, in 1865.

NEWS NOTES AND PERSONALS

THE eightieth annual Indiana conference of the Catholic Hospital Association was held November 20 and 21 in Terre Haute.

MRS. MYRTLE M. GRIGGS, of Indianapolis, has assumed the duties as chief clerk in the state board of medical registration and examination.

A physicians' exchange has been established in Anderson to enable the patients of doctors to locate them by telephone in cases of emergency.

DR. C. E. ORDERS, of Indianapolis, has been made a lieutenant colonel in the medical reserve corps of the U. S. army through a recent promotion.

THE November meeting of the Madison County Medical Society was held in the private dining room of the Y. M. C. A., in Anderson, November 19th.

THE Fountain-Warren County Medical Society held its regular meeting November 14th at Williamsport. Thirteen members and guests were present.

DR. CHARLES P. EMERSON, of Indianapolis, was re-elected president of the National Committee of Mental Hygiene at the meeting held in November in New York City.

DR. H. O. and DAILEY JONES, of Berne, recently presented the Adams County Memorial hospital with a Japanese elm tree to be placed in the hospital grounds.

A lecture course in physical therapy with demonstrations of advanced technique, was given by Charles L. Ireland, M.D., at Indianapolis, December 2nd to 7th.

DR. JOHN F. BARNHILL, of Indianapolis and Miami, Florida, was made president of the American Academy of Ophthalmology and Otolaryngology at the annual session of that organization held recently in Atlantic City.

THE Hamilton County Medical Society held its meeting at Sheridan, November 12th. The dentists of the county also were invited to attend the meeting. Papers were presented by Drs. Carter and Mitchell, of Indianapolis. The annual meeting of the Society will be held in Noblesville next May.

AT the November 14th meeting of the Tippecanoe County Medical Society in Lafayette, Dr. A. E. Sterne, of Indianapolis, presented a paper on "Basic Factors in Crime; Its Relationship to Heredity, Training and Environment and Phases Peculiar to the U. S. A." The meeting was open to the public.

FIVE Indiana University students have been elected to membership in Theta Kappa Psi, honorary medical fraternity at the University. The new members are E. Herendeen and Charles Holder, of Bloomington, Robert Butterfield and Floyd McCammon, of Muncie, and Everett Thomas, of Leesburg.

THE November 12th meeting of the Muncie Academy of Medicine was held at the Hotel

Roberts. Dr. B. Barker Beeson talked on "Common Skin Diseases." The paper was illustrated with lantern slides. At the November 5th meeting, Dr. John Warvel, of Indianapolis, presented a paper on "Diabetic Coma".

THE weekly meeting of the Indianapolis Medical Society was held November 19th, at the Athenaeum. Papers were presented by Drs. Elmer Funkhouser, and Henry Beckman and discussions by Drs. George Bond and G. B. Jackson. At the November 26th meeting papers were presented by Drs. James H. Stygall, John Carmack, and discussions by Drs. C. P. Emerson and O. N. Torian.

THE second seminar of the present school year was held in the Auditorium of the Indiana University Medical School, Indianapolis, November 22nd. Cases were presented by Drs. Edward Billings, Joseph Clevenger, George Garceau, G. Burch Mehlin, Lawrence Robrock, Earl Wiseman, R. A. Solomon, Jewett Reed, and Harold M. Trussler. A social hour with refreshments followed.

THE fortieth annual session of the Association of American Medical Colleges was held in New York City, with headquarters at the Hotel Pennsylvania, November 7, 8, and 9. Dr. Burton D. Myers, of Indiana University School of Medicine, and president of the Association of American Medical Colleges, presented a paper on the study of applicants for admission to medical schools.

THE Delaware-Blackford County Medical Society held its regular meeting at the Hotel Roberts, Muncie, November 19. Dr. H. D. Fair, of Muncie, addressed the society, his subject being "The Last (Obstetric) Resort." Officers were elected, Dr. E. H. Clauser, of Muncie, being elected president, Dr. F. R. Langsdon, vice-president and Dr. T. R. Owens, secretary-treasurer.

DR. E. E. HOLLAND, of Richmond, was made president of the Wayne-Union County Medical Association which held its 124th semi-annual meeting at Connersville, October 30th. Dr. F. T. DuBois, of Liberty, was made vice-president and Dr. W. L. Porter, of College Corner, secretary-treasurer. The next meeting of the Association will be held at Liberty the last Thursday in April, 1930.

THE United States Civil Service Commission announces open competitive examinations for physician and associate physician, United States Veterans' Bureau, at salaries of \$3,800 and \$3,200 per year respectively. Applications will be rated as received by the Commission at Washington,

D. C., until December 30, 1929. Complete information may be obtained from the U. S. Civil Service Commission.

THE Danville physicians entertained the members of the Hendricks County Medical Society with a banquet at the Hill Top home of Miss Stella Hendricks at the October session. Dr. Sicks, of Indianapolis, followed with an instructive illustrated lecture. The following officers were elected for the 1930 season: E. R. Royer, president; T. R. Barker, vice-president, and W. T. Lawson, secretary-treasurer.

THE United States Civil Service Commission announces open competitive examination for Associate Medical Officer and Assistant Medical Officer, for filling vacancies occurring in the federal classified civil service throughout the United States. Applications will be rated as received by the U. S. Civil Service Commission at Washington, D. C., from whom complete information concerning the positions may be obtained, until December 30, 1929.

THE U. S. Civil Service Commission announces open competitive examination for senior medical officer (internal medicine) and junior medical officer (interne). Salaries are \$4,600 and \$2,000 per year respectively. Applications for these positions must be on file with the Secretary of the Fourth U. S. Civil Service District, Washington, D. C., not later than December 26. Examinations are to fill vacancies in Saint Elizabeth's Hospital, Washington, D. C., and vacancies occurring in positions requiring similar qualifications. Full information may be obtained from the Fourth U. S. Civil Service District, Washington, D. C.

B. S. KLINE, chief of laboratory, Mount Sinai Hospital, Cleveland, visited on Monday, November 25, the laboratory of the Indiana State Board of Health, Indianapolis, and demonstrated his microscopic slide precipitation test for syphilis. Some thirty local pathologists and technicians attended the demonstration. Dr. Kline's test is much simpler to perform and much easier to read than other tests for syphilis. The antigen emulsion is relatively stable and satisfactory for use for two days after preparation. The test requires no incubation, no humidor cover, and may be done in a room regardless of its temperature or humidity. Clinical evaluation of the test has shown its reliability.

In addition to the articles already enumerated the following have been accepted by the Council on Pharmacy and Chemistry of the American Medical Association:

Cutter Laboratory:

Diphtheria Toxoid-Cutter

Eli Lilly & Company:
 Merthiolate.
 Winthrop Chemical Company, Inc.
 Luminal Capsules, one and one-half grains.

SOCIETIES AND INSTITUTIONS

INDIANA STATE MEDICAL ASSOCIATION BUREAU OF PUBLICITY

October 28, 1929.

Meeting called to order at 4:30 p. m.

Present: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., by proxy, and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held October 18 read and approved.

The release—"That Health Appeal"—read and approved for publication Saturday, November 2.

Radio release—October 26—"The Family Medicine Cabinet."

Letter and pamphlet received from the Committee on the Cost of Medical Care, giving an outline of the first two years' work of the Committee.

Letter received from the American College of Surgeons along with a pamphlet announcing "the completion of a number of medical motion picture films produced by the Eastman Teaching Films, Inc., in cooperation with the American College of Surgeons." The following comment was made upon these films: "This is a move in the right direction but is not sufficiently advanced for the Bureau of Publicity to take any action on it. At least some of these films should be seen before any further attention is given to them. Probably they will be shown at the next meeting of the American Medical Association at which time a better opinion can be formed as to their teaching value. Literature should be referred to the Committee on Scientific Work. There will be ample time to consider these films for next year's state meeting."

Letter received from the chairman of the Medical Economics Committee of the Iowa State Medical Society asking numerous questions in regard to the problems faced by the Iowa committee. Although the answers to these questions are in accord with the well-known policies of the Indiana State Medical Association and should be a byword of every physician in Indiana, the Bureau is reprinting the questions and their answers in order that all may be familiar with the stand of the Bureau on these questions.

1. Vaccination and immunization of school children. Shall it be done by family physician, school physician, or health officer? In doctor's office, in school, or at home? Regular fees, or at reduced rates?

It is preferable to use vaccination and immunization for school children either at their home or at the office of the family physician. If it is an epidemic or emergency it can be delegated to the health officer and performed by him or the physician in the school. Regular fees as a rule should be charged.

2. Health examinations. Who make them? Fees?

Should the profession encourage them? What publicity?

Health examinations should be made by the family physician as a rule and the profession should be urged to make regular periodic examinations. In Indiana the Bureau of Publicity has supplied every member of the Indiana State Medical Association with a booklet on this subject prepared by the American Medical Association. Through its weekly releases and through its staff of speakers the Indiana State Medical Association is constantly stressing the importance of periodic physical examinations and emphasizing the fact that bodily book-keeping is of more importance than commercial book-keeping and that physicians and patients should preserve

the records of examinations made, for the benefit of the patient.

A reasonable fee always should be charged by the physician making the examination and the examination should be so thoroughly made that the fee is earned. Publicity through district and county medical societies and constant emphasis upon its importance through all avenues of publicity is a part of the task of the Bureau of Publicity of the Indiana State Medical Association and also of each county society.

3. What attitude should members of the society take toward clinics?

This question is not clear as to the type of clinics referred to or the manner of conducting them. If it is meant to refer to medical society postgraduate courses, they are commendable. If it is meant to refer to so-called baby clinics and publicity stunts by individual physicians or local or state health officers, they are most objectionable. The latter class of so-called clinics is of little or no scientific value and lead to objectionable personal prominence of individual physicians and health officers conducting them. Their educational value to the public is generally limited to an emotional appeal and the reaction is usually transient and misleading in its effect upon the public.

4. What should be our attitude toward 4-H Club health contests? Baby health contests? Charges?

The attitude toward 4H Club health contests should be conservative and advisory. The same applies to baby health contests. Both are of questionable value and any professional service rendered in connection therewith should be compensated for at regular prices.

5. On what terms should we doctor the indigent?

The attitude of the profession toward the indigent is always humanitarian. Rightly applied in well organized communities it means the promotion and intelligent direction of organized effort for relief of the indigent and the promotion of self help by the indigent.

6. Is the relationship equitable as commonly exists between corporation physicians and surgeons and the other members of the profession?

This question is not at all clear in our minds and would have to be amplified if answered in full.

7. What should be the connection between the medical profession and large lay organizations which are interesting themselves in personal hygiene and public health?

The attitude of the medical profession in relation to lay organizations should always be one of conservative interest and helpfulness. It should only involve cooperation where substantial public good can obviously be accomplished.

8. Should the medical profession seek publicity through ethical advertising? If so, which unit (City, County, State, Nation) should do the advertising?

No. There is no such thing as ethical advertising. The printing of a card bearing a physician's name and indicating his office hours and location cannot properly be regarded as advertising. There is a difference between advertising and legitimate publicity of scientific information and effort. Doing one's work well and interpreting it as impersonally as possible to the medical profession is the best way to extend one's reputation, but this cannot fairly be called advertising.

The following bills were approved for payment:

W. K. Stewart Co.	\$.65
Curtis 1000, Inc.	24.91

Total\$25.56

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 1, 1929.

BUREAU OF PUBLICITY

November 1, 1929.

Meeting called to order at 4:30 p. m.

President: Wm. N. Wishard, M.D., Chairman; J. A. MacDonald, M.D., and Thomas A. Hendricks, executive secretary.

Minutes of the meeting held October 28 read, corrected and approved.

The release—"The Family Medicine Chest"—read and approved for publication Saturday, November 16.

Radio release, November 2—"Mumps".

The following report of medical meeting was received: October 30—Grant County Medical Society, Marion, Ind., "Orthopedics from the Standpoint of the General Practitioner."

The following bills were approved for payment:

Central Press Clipping Service.....	\$ 5.34
The Bailey Office Supply.....	15.00

\$20.34

There being no further business, the meeting was adjourned.

The above minutes were approved in each separate part and as a whole November 8, 1929.

EXECUTIVE COMMITTEE

The regular meeting of the executive committee of the Indiana State Medical Association was held on November 19, 1929. After passing upon routine business including bills for the current month, and the report covering receipts and expenditures for the Evansville session, the committee took up the discussion of several matters of interest to the Association members.

The insanity inquest resolution introduced in the House of Delegates at the Evansville session was referred to Albert Stump, attorney for the Association. Mr. Stump made a report which appears in the Medico-Legal Department in this issue of THE JOURNAL.

The committee suggested that Mr. Stump prepare an article for THE JOURNAL, including this report and also his opinion upon the question as to whether or not it is obligatory for a physician to serve in an insanity inquest. *Complaints Against Riley Hospital Bulletins.*

During the Evansville meeting the Council discussed the bulletins prepared for the lay public by the Extension Division of Indiana University in regard to cures being effected at the Riley Hospital.

The complaint against the Riley Hospital bulletins, published in the Council minutes, October, 1929, page 458 of THE JOURNAL of the Indiana State Medical Association, was read.

Dr. M. A. Austin, Councilor for the Eighth District, read the following:

"As Chairman of this Committee dealing with the relations of the University Hospitals in the medical profession, I find a number of problems that are worthy of most serious consideration. Among them of greatest importance is the value these hospitals and their facilities could be to the advancement of medical study for the benefit of not only the student body in the medical school but also to the profession at large. At present it appears that so-called social service has the limelight, and these intensive drives in every county in the state are for the purpose of solely increasing the number of cases irrespective of their needs demanding special care and attention, or local facilities fully as able to care for them at home as in Indianapolis.

"So far as I can see the latest issues of the bulletin are as trashy as the former ones were all wet with sob stuff. Compiled entirely for generous distribution to the laity, they infer between the lines that one is criminally negligent if they do not take advantage of the superior services of Riley Hospital, should one's child become ill, and also that one should see that his neighbors are advised of such a place so they may save their children

from making the mistake of thinking of home treatment for anything more than measles or mumps.

"I believe that the future will show us an economic readjustment in which state medicine will have a place not only to the betterment of medical services to the laity but also to the betterment of the profession as a whole. We have a need for the state hospitals at the present time, as a clearing house for unusual cases demanding special care that cannot be given in their home community, and for other cases worthy of better care than they can afford to pay for or receive without financial assistance. On the other hand the taxpayers should not be imposed upon to pay for hospital care of people who spend all their earnings and mortgage their future for luxuries. It is an everyday story to have someone tell us they can't pay us because they have to keep up their payments on the automobiles, radios, electric house appliances and such things. And we are having these same people now come to us to have their papers made out to send some member of their family to a university hospital, because some neighbor or friend has told them they could be sent to Indianapolis and get everything free.

"One can easily criticize and it is altogether probable that these problems of the medical profession are but small affairs compared to some which the managements of these hospitals have to consider. And it is unfair to offer criticism unless one can also offer a remedy. I present the following:

The Bulletins. "There is no reason or purpose for them being issued as they have been and mailed to the laity except for the purposes I have stated and they should be discontinued as such. If issued at all they should be sent to the medical profession and contain case reports or a monthly review of advanced medical problems or announcements such as given in other bulletins issued by other hospitals, such as the Clifton Springs and Battle Creek Sanitariums. These come to me regularly and are of the greatest interest and value as they always contain something new, or bring out something important in something old.

Referred Cases. "I have referred several interesting cases to Riley Hospital. Fredericks Ataxia, Stills Disease and Acute Haematogenous bone cysts are uncommon and worthy of close study. I sent them there and hoped for diagnostic verification or criticisms. One case decided not to go. One went and was not admitted on account of a scarlet fever quarantine and I have not been able to get her back to Indianapolis. The bone cyst case, however, was examined at the dispensary and a diagnosis of osteomyelitis made. Instead of making a report to me of their diagnosis and having the child continued under my observation, I was ignored and the family advised to return the child in a month for another examination. This child has not been seen by me since I referred the case to Indianapolis four months ago and not until I wrote to the hospital especially concerning the case did I get word about her. However, I did get two letters from a personage signed State Worker, who insisted upon me having the child returned to Indianapolis on specific dates for re-examinations. I talked to the aunt of the child and asked if anything had ever been said about them having the child continue under my observation also and they said there had not.

"If the hospital has such an efficient Social Service Department why can't some money be expended in having the attending physician sent a report of the examination and diagnosis and suggested treatment, and also notified as to when possible surgery would be performed? I have enough medical interest in my cases to make a trip to see what is done for my cases even if I get nothing out of it financially.

Social Service. "If we could eliminate the unhappily married, and some others who have taken up Social Service as a substitute for the male, we would have done away with a lot of busy bodies and parasites who are drawing good salaries from Social Service agencies, that

are attempting to satisfy their maternal urge in paternalistic movements. Ten years of intimate experience with several thousand employees of one industry showed me our time and the company's money were wasted whenever we tried to interfere with any advice or suggestion concerning the employee's welfare or comforts. And it usually was resented and ended in the employee saying, if he were paid better wages he would be able to live better in his own way.

"Self-respecting people resent charity. Parasites are not entitled to it."

In addition Dr. Austin quoted the following from the article entitled "State Medicine or What?" prepared by him and published in the August, 1929, issue of THE JOURNAL of the Indiana State Medical Association:

"Some physicians have been sending to the state hospitals patients who could pay a moderate fee to the family physician or specialist, and get them in by certifying that they are indigent. Sometimes this is done in order to favor a family whose possible prestige is desired. I have made a number of personal investigations of cases, and find that in most every community there is some physician who feels that in saving his families a hospital bill by sending them to a state institution he is more likely to hold the family for their other work and get his pay from them. Others send their patients to state hospitals because of a grudge against local associates. Others have charged a fee to these patients for taking them to a state hospital and for visits to the patient while there.

"The fact is that no patient can be sent to a state hospital without the certification of some physician, and so we cannot place the blame any place but in the county where the case came from. There are political aspects to the situation also that must be considered, in that the broadcast methods of the outpatient departments have given the people an idea that anyone can go to the state hospitals and get free medical or surgical service if he has a little political pull, and so pressure is brought upon political friends who get a physician to make out the papers, or failing in this, have the court appoint a physician, which he can do, and on this report the judge commits the patient to the state hospital.

"Another factor working to our disadvantage is the fact that township trustees have found that they can save their township funds for other purposes by having cases sent to the state hospitals, and have the county pay for the care of the cases instead of the township."

In behalf of the Indiana University School of Medicine the following was offered:

Bulletins. "Indiana University is only interested in the Riley Hospital for teaching purposes. The general profession looks upon all hospitals located in the so-called university group as university hospitals. The Riley Hospital is included in this group but it is essentially different from the other university hospitals located in Indianapolis.

"Originally two groups were interested in the founding of the Riley Hospital. The first group was interested primarily in the erection of a hospital for children. The second group was interested in the erection of a memorial for James Whitcomb Riley. The two groups combined upon the foundation of the Riley Hospital. This was not a University movement but the University inherited the Riley Hospital through legislation passed by the Indiana General Assembly. This legislation giving Indiana University a part in the movement was passed in order that the hospital might be organized so it would be open and running under all conditions and at all times. The founders of the Riley Hospital took this precaution, as during their visit to the Children's Hospital in Boston they found that institution closed and they decided that if a hospital for children was to be built in Indiana it must be so organized that it would never be closed. The only agency through whom this could be guaranteed was the state of Indiana, so the Riley Hospital founders asked the University to take over the management of the Riley

Hospital. This being the case the Riley Hospital was organized differently from a hospital that the University would have organized had the University rather than the founders of the Riley Hospital had complete control in the matter. Although the University has charge of the Riley Hospital, the hospital board, composed of laymen, (among them representatives of some of the most powerful financial interests in the state, are interested in the Riley Hospital), controls the policies of the Riley Hospital and these men are not going to see the hospital do anything else but prosper and be filled to capacity.

"In order to be assured that the Riley Hospital would be filled these members of the board obtained the authority and full consent from the late Dr. Sam Smith, provost of the Indiana University School of Medicine, to organize and conduct the issuance of hospital bulletins once a month. These bulletins are the ones to which the medical profession has objected. More than 30,000 persons in Indiana have an interest in the Riley Hospital, and the Riley Hospital Memorial Association thinks these 30,000 people have a right to have a report of what is going on out there. Since objection has been raised to these Riley Hospital bulletins we have had a meeting and have arranged for Dr. E. T. Thompson, administrator of the University hospitals, to oversee the issuance of these bulletins and to see that nothing is printed in them which would be objectionable to the medical profession."

Social Service. "Complaint has been made concerning the work that the nurses are doing in the counties. To obviate this the social service nurses have been instructed to conduct campaigns in the counties only upon invitation of each local county medical society."

Dr. Austin said that the nurses go to Parent-Teacher Associations, women's clubs and various other organizations and laud the Riley Hospital service to such an extent that the impression is left with the audience that it is criminal for anyone to neglect to send a child who is ill to the Riley Hospital. It was said that the nurses who have been making these talks in the past have been asked to make these talks before one of University officers who will see that anything that they may say which gives this impression will be eliminated.

Non-indigent Patient Abuse. It was pointed out that when a judge and a physician connive to certify a patient to the Riley Hospital as indigent who is not indigent, that the hospital can do nothing but take the patient. Dr. Kennedy said that Dr. Garceau, who is attending physician at the Riley Hospital, had told him that a judge threatened to cite the heads of the Riley Hospital for contempt of court in one case where the Riley Hospital had refused to take a patient because it was felt that the patient was not indigent.

Reports on Patients. Dr. Austin spoke of the fact that he had referred at least one case to the Riley Hospital and the Hospital had given him no report upon the patient. An officer of the University said that such action was unpardonable and that reports of patients referred to the Riley Hospital should be sent to the physician by whom the patient was referred to the Hospital.

Dr. Austin brought up the fact that tonsil cases had been sent from his county to the Riley Hospital that could have been taken care of just as well in the local community as at the Riley Hospital. This was answered by the statement that the number of tonsil cases coming to the Riley Hospital is very small.

Cooperation. A representative of the University said said the Committee may be sure that the attitude of the Indiana University School of Medicine would be wholly cooperative. He said, "I think the situation is well in hand and if it ever gets out of hand let us get together and try to correct matters as soon as possible."

Question of Unconstitutionality of Action of House of Delegates in Regard to Seating a Member of the State Board of Health as a Delegate. Dr. Bulson raised the question as to the unconstitutionality of the action of the House of Delegates at the Evansville session in giving the

State Board of Health representation in the House of Delegates. The matter was referred to Mr. Stump, attorney for the Association, who has written the following opinion concerning the action of the House of Delegates:

"I have, at the request of your Executive Secretary, examined that part of the minutes of the first meeting of the House of Delegates at the 1929 session which have to do with the attempted amendment to the By-Laws admitting a member of the State Board of Health to the House of Delegates.

"In connection with the examination of that part of the minutes of the session I also studied the Constitution of the Association, and the By-Laws.

"From such examination and study of the minutes, the Constitution and the By-Laws, it is my opinion that the action of the House of Delegates was not effective to accomplish the amendment of the By-Laws so that a member of the State Board of Health could be admitted to the House of Delegates. The 'Editorial Notes' in the October number of THE JOURNAL, commenting on the situation, presents the reasons for the conclusion I have reached as clearly as I could do. The Constitution can be amended only in the manner provided in the Constitution. That is, by presenting in open meeting at an annual session the proposed amendment, then publishing it twice during the ensuing year in THE JOURNAL, and then the House of Delegates adopting the proposed amendment by a two-thirds vote of the delegates present at the annual session following that annual session in which the proposed amendment had been presented in open meeting. The Constitution itself provides who can be delegates.

"The By-Laws can be amended only in the manner provided in the By-Laws. That is by a majority vote of all the delegates present at any annual session after the proposed amendment has lain on the table for one day. The scope of the By-Laws can not be enlarged to change the Constitution. The By-Laws are effective only as to matters, consistent with the Constitution, concerning which the Constitution has not made provision.

"I would suggest that the purpose sought to be achieved by the attempted amendment, enlarging the qualifications for membership in the House of Delegates, might be achieved by permitting some member of the State Board of Health to attend and participate in discussions in the meetings of the House of Delegates, but not to have any right to vote. If this suggestion should meet with your approval the plan might be followed as a temporary expedient until the Constitution could be amended in the regular constitutional manner."

Letter from Mississippi State Medical Association. Request received from president of the Mississippi Medical Society for information in regard to the handling of the Indiana State Medical Association. The Committee was pleased to hear that the president of the Mississippi Medical Society was referred to Indiana by Olin West, M.D., secretary of the American Medical Association, who, according to the request, spoke most highly of the work being done in Indiana. A detailed answer concerning the work done in Indiana was sent to Dr. H. A. Gamble, president.

THOMAS A. HENDRICKS,
Secretary.

INDIANA STATE BOARD OF HEALTH

DIVISION OF COMMUNICABLE DISEASES
MONTHLY REPORT, NOVEMBER, 1929

The reports of communicable diseases sent in by the Health Officers of the state during the month show a marked increase over the preceding month, except typhoid fever.

Typhoid Fever as was expected shows a decline. November is the beginning month for the season's decline for this disease. October is shown to be the peak month. The estimated expectancy for October was one hundred

forty-nine cases and the estimate for November is fifty-seven cases. The estimated expectancy is based on the experience of the last seven years. Twenty-two cases were reported this month and thirty-two cases last month. Typhoid fever will come again next summer. Not so great, for the disease is on the decline. The human carrier will keep it going for a time yet.

Smallpox is the most prevalent disease reported during the month, six hundred thirty cases. It is epidemic in Indiana. The previous month reported eighty-six cases. Thirty-five counties and twenty-one cities reported cases. The urban reported three hundred two and the rural three hundred twenty-eight cases. The greatest number from any one city was Fort Wayne with seventy-six cases; the greatest number from any one county was Greene with one hundred twenty cases. There is only one answer to all this and that is vaccination. The records show that when smallpox is prevalent, chickenpox is also prevalent in the same community. There is a likeness in the picture of the two diseases, especially in light cases of smallpox. This is generally known. There is no doubt that many light cases of smallpox slip through the diagnosis and are pronounced chickenpox. There are a great many persons and homes that would rather have chickenpox than smallpox. So, many are given the preference. There were five hundred ninety-four cases of chickenpox reported during the month.

Scarlet Fever is increasing in prevalence. Five hundred fifty-seven cases were reported for this month and two hundred forty cases the preceding month. This is in keeping with the season's averages. The estimated expectancy was five hundred forty-three cases. The high morbidity rate will not be shown until in late winter, usually February. The mortality rate coincides with the morbidity rate almost exactly.

Diphtheria shows a decided increase for the previous month with two hundred eleven cases and one hundred thirty-three cases. The normal average for November is two hundred ninety-eight cases. Diphtheria is comparable to all other close contact diseases, except measles, which is most prevalent in cold weather.

Measles is a later winter and early spring disease, only fifty-eight cases were reported for this month and thirty-six cases the preceding month. The answer to the prevalence of scarlet fever and measles is to locate all the cases and put them under close quarantine as prescribed by law, then report them to the Health Authorities.

Tularemia. One case was reported from Evansville. This case was published in the public press. The Department asked for information concerning the case. If it was diagnosed as tularemia to report the case. It was reported. Tularemia is a reportable disease. Physicians knowing of cases of the disease should report them to the health officer having jurisdiction. This department does not receive the reports of this disease. If the news items are authentic, the health officer should report them.

The name and number of disease reported during the month not mentioned above are as follows: Tuberculosis, two hundred twenty-nine; whooping cough, one hundred four; influenza, twenty-eight; pneumonia, nineteen; mumps, twenty-six; poliomyelitis, four; cerebro-spinal meningitis, six cases.

The director investigated what was supposed to be an outbreak of trachoma in the Jackson school, Randolph county. The disease was not trachoma but chronic catarrhal conjunctivitis which is a common eye trouble in the fall and spring. Most of the cases were convalescent.

H. W. McKANE, M.D.

Collaborating Epidemiologist, U.S.P.H.S.

THE WOMAN'S AUXILIARY TO THE AMERICAN MEDICAL ASSOCIATION

The mid-year meeting of the Board of Directors of the Woman's Auxiliary to the American Medical Association

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SOCIETIES AND INSTITUTIONS

THE WOMAN'S AUXILIARY

(Continued from Page 540)

was held in Chicago, November 15th. Mrs. G. H. Hoxie, Kansas City, President, presiding.

The Indiana women in attendance, Mrs. M. A. Auston, Anderson, president-elect of the Woman's Auxiliary to the Indiana State Medical Association, and Mrs. F. W. Cregor, Indianapolis, first vice-president and chairman of the organization of the Woman's Auxiliary of the A. M. A.

As the aims of the Auxiliary are social and educational, the need of self-education of its members was thoroughly discussed; study program, individual reading, round-table discussions, lectures, were heartily recom-

mended by Mrs. Hoxie, who stresses, in particular, the acquiring of some knowledge of health conditions.

Owing to the illness of Mrs. Allen H. Bunce, president of the Auxiliary last year, and now chairman of Press and Publicity, Mrs. James Blake, Hopkins, Minnesota, was appointed to continue the work for the dissemination of Auxiliary news through the various state journals. The financing of a bulletin for the thirteen thousand members is a problem of the future. Contributions to the treasury are welcomed; many present made pledges.

A greater interest in the circulation of *Hygeia*, the health magazine, was urged by Mrs. A. B. McGlothlan, St. Joseph, Missouri, chairman of *Hygeia*. Many Auxiliaries finance their activities by *Hygeia* commissions. This magazine should be found in club, city and state libraries; it may be given as gifts, sent to legislators, and placed on transcontinental trains. "Healthyland" is an alluring addition to a child's books.

Card systems for the various states were suggested, with members using their husband's initials; this is one organization in which a husband's profession makes the wife eligible.

Mrs. Cregor reported sending questionnaires to the organized states to secure data for the establishment of organization files; interest in the formation of state auxiliaries in Ohio, Arizona, and Wisconsin; Pennsylvania leads the states in membership, having almost seventeen hundred paid-up members enrolled.

An excellent model for eligible Indiana women (Mrs. A. C. Clauser, Delphi, is chairman of state organization.)

Plans for the annual session in Detroit were outlined; hopes are high for an unprecedented enrollment, with accompanying enthusiasm.

Messages from the Advisory Council of which Dr. Morris Fishbein and Dr. Olin West are members were conveyed by Mrs. Hoxie, and the president-elect, Mrs. J. N. Hunsberger, Norristown, Pennsylvania.

The meeting was adjourned at four o'clock to attend a reception and tea at the Illinois Women's Athletic Club, hostesses being Mrs. John R. Neal, Springfield, President, and other officers of the Woman's Auxiliary to the Illinois State Medical Association.

Respectfully submitted,
MRS. F. W. CREGOR,
First Vice-President.

ST. JOSEPH COUNTY MEDICAL SOCIETY

The St. Joseph County Medical Society met in its room in the Public Library, October 22, 1929, at 8:30 P. M., with the president, Dr. A. D. Huffman, in the chair.

The paper of the evening, "The Bile Factor in Acute Pancreatitis", was read by Dr. A. S. Giordano. This paper was based upon animal experimentation carried on by Doctors Mann and Giordano at the Mayo Clinic and previously published in 1922. It was illustrated by lantern slides and discussed by Doctors M. W. Lyon, Jr., J. E. McMeel, and H. T. Mitchell.

Dr. George Geisler, chairman of the program committee, announced that the annual meeting of the Society would be held November 20, 1929.

The St. Joseph County Medical Society meeting was called to order by Doctor Huffman, October 29, 1929, at 8:30 p. m.

Dr. K. T. Knode gave the paper of the evening on "Recent Tendencies of Infant Feeding". Below is Doctor Knode's abstract of his paper:

"Any paper upon this subject merely accentuates the specificity of human milk in the feeding of infants, and the younger the child the more this is true.

"Artificial feeding of infants is, a recent thing. Bredest, Ratch, and Jacobi were the outstanding men in its early development. From the work in infant feeding the following principles have developed. (1) The average

child needs from 40-50 calories per pound of body weight during the first year. (2) Protein should cover about fifteen percent of diet—from 1.5 gr. to 2 grs. per kilo of body weight. (3) Fats should cover thirty-five percent of diet. (4) Carbohydrates about fifty percent — general principle is that babies under 10 pounds need one ounce and above that one and one-half ounce is needed. The sugars containing mixture of dextro-maltose, etc., are most frequently used. (5) The usual whole milk dilution supplies enough mineral and water for average child. (6) The vitamins are supplied by butter fat, eggs, fresh orange juice and cod liver oil.

"Some outstanding tendencies in infant feeding: (1) Feeding newborns until mother's milk appears. (2) Universal acceptance of value of boiling milk. (3) Diluting whole milk with water and adding some sugar is oldest and most extensively used method of milk modification. (4) Recognition of acidified milk as a valuable asset in infant feeding, the lactic acid preparation being the most popular. (5) Advantage of feeding infants under one year some solid food, such as cooked cereal at five months and vegetables at six months. (6) Use of proprietary milk preparation in infant feeding. (7) The use of Soobee in cases of severe sensitization to the protein of cow's milk, and (8) Realization that many children do not thrive on a diet properly selected because of some parental infection, and it will not do well regardless of diet until the infection is removed.

"In conclusion, tendency is to use the simplest methods that will produce the best results. Any man in general practice has sufficient knowledge to feed infants, if he would only correlate his knowledge and take time to tell the mother."

The paper was discussed at length by Doctors Charles S. Bosenbury, M. K. Miller, Charles Stoltz, M. W. Lyon, Jr. and Knode.

Doctor Bosenbury most aptly expressed his ideas at the conclusion of his discussion by the following rhyme:

"We're the bottle fed babies, fed just so,
Pure clean milk and H₂O.
Add a little sugar. Here we go!
Gurgle, gurgle, gurgle. Watch us grow!
The meeting adjourned at 9:45.

On November 12, 1929, the St. Joseph County Medical Society was addressed by Mr. M. J. O'Meara, a legal adviser, on "Jurisprudence". Many questions were asked and answered during the evening.

MARTHA BREWER LYON, M.D.,
Assistant Secretary and Treasurer

CORRESPONDENCE

STANDARDS FOR MATRICULATION IN MEDICAL SCHOOLS

Bloomington, Indiana,
November 16, 1929.

Editor THE JOURNAL:

I am enclosing under this cover a copy of the program of the meeting of the Association of American Medical Colleges held at the Columbia University Medical Center.

The Columbia University group of buildings is a magnificent group, way up on Riverside Drive at 165th to 168th Streets. They rise eighteen stories in the air. The major part of the plant is, of course, their eight hundred and fifty bed hospital. Our plant at Indianapolis is not so impressive perhaps from a sky-line point of view, but we have more than eight hundred and fifty beds, counting the City Hospital beds, so our facilities are really quite as good as those of this great plant.

I trust it will please you to know that the Secretary of the Association, Dr. Zapffe, who reviews all State Medical Journals, spoke in the highest terms of our State Journal and particularly of your Indiana University School of Medicine News within that Journal.

I want to tell you just a bit of some of the papers.

For four years past I have been making a study of applications for matriculation in medical schools. Summarizing this study briefly, I may say that in the fall of '26 about 6,500 men were accepted for matriculation in the medical schools of the United States and Canada; in the fall of '27, the number was essentially the same; in the fall of '28, 7,000 students were accepted; and in the fall of '29, the same number. In the fall of '26, 3,500 students were refused matriculation in every medical school in which they applied; in the fall of '27, 4,500 students were refused; in the fall of '28, 5,500 students were refused; and in the fall of '29, 6,500 students were refused.

With students applying in numbers so far in excess of capacity of schools to accept them, much attention has been given to various plans under trial, the purpose of which is to select the very best students from the list of those applying. One of the papers presented made a study of the correlation between the number of hours of premedical work and the accomplishment in medical schools. A group of one thousand or more students accepted by medical schools was divided into three subgroups; those having sixty semester hours (two years of premedical work), those having ninety semester hours (three years of premedical work), those having 120 semester hours (four years of premedical work). The interesting result is that the scholarship in medical school is a bit in favor of the sixty semester hour people, though the difference is so slight that it would perhaps be fairer to say that the accomplishment in medical school was as good on the part of one group as of another. This is only another way of saying that students have a fundamental ability that is not changed materially by additional time spent in college beyond the minimum of two years.

A study of methods of selecting students was presented, as applying to some two thousand students. The first method has already been discussed, that of increasing the requirements quantitatively, requiring ninety or 120 instead of sixty hours of premedical work. Another method is that of requiring a premedical average of C for admission to medical school. This qualitative increase in requirements is more important than the above described quantitative increase, but it has the disadvantage that while the average grade of C excludes 64 percent of potential failures, it also excludes 16 percent of the successful students in the group. The most desirable method of selecting students is a combination of the aptitude tests, premedical scholarship tests, and a personal interview.

Evidence that many schools are not using the best method of selecting applicants was brought out in a symposium presented by the Deans of Long Island Medical College, Boston University School of Medicine, and St. Louis University School of Medicine. In each instance, these men had sent me the list of students accepted in 1926, 1927, and 1928. I gave them information as to the number of applications made by each student, to what schools each student had applied, and what disposition had been made of the case by the schools to which each had applied. They took the group of students within each group in each school that had applied from six to ten medical schools or more, and made a study of the accomplishment of this group of students in the medical school. They found that the accomplishment of many of them was very creditable, and essentially the same as the accomplishment of that group of students which had applied just once and had been accepted by the medical school to which they applied. This, of course, is an amazingly interesting finding and correlates with the other reports.

We have never used the aptitude tests in Indiana University, but we have used a combination of scholarship tests and personal interviews, with the result that we have reduced our failures in our Freshman medical year to 3 or 4 percent, whereas, the failures in the Freshman

year of many medical schools is five times as many as that. This is a matter of very great importance to the student and to the school.

From the standpoint of the school, it is bad economy to go to the expense of carrying a group of students for a year, only to have them fail. From the standpoint of the student, it is a misfortune to be permitted to start and carry through a year's work, only to bust out at the end.

I am sending you this material in the hope that you may find something of interest in it for THE JOURNAL.

Very cordially,

B. D. MYERS,
Dean at Bloomington.

BOOK REVIEWS

Books received will be acknowledged in this column. Selections will be made for more extensive review in the interest of readers and as space permits. Further information concerning these books will be supplied on request. Books received since November 1:

MEDICAL LEADERS. From Hippocrates to Osler. By Samuel W. Lambert, M.D., and George M. Goodwin, M.D. Illustrated. 331 pages. Cloth. Price \$5.00. The Bobbs-Merrill Company, Indianapolis, 1929.

INTRODUCTION TO STUDY OF THE NERVOUS SYSTEM. By E. E. Hewer, D. Sc., Lecturer in Histology at London School of Medicine for Women; and G. M. Sandes, M.B., B.S., M.R.C.S., L.R.C.P., Demonstrator in Anatomy at London School of Medicine for Women, etc. 104 pages. Illustrated. Cloth. Price \$6.50. The C. V. Mosby Company, St. Louis, 1929.

THE NEWER KNOWLEDGE OF NUTRITION. Use of Foods for the Preservation of Vitality and Health. By E. V. McCollum, Ph. D., Sc. D., Professor of Chemical Hygiene in the School of Hygiene and Public Health, Johns Hopkins University; and Nina Simmonds, Sc.D. Illustrated. Fourth edition, rewritten. 594 pages. Cloth. Price \$5.00. The MacMillan Company, New York, 1929.

THE SURGICAL CLINICS OF NORTH AMERICA. Philadelphia Number. Volume 9, number 5. Issued serially, one number every other month. Philadelphia number for October, 1929. 299 pages with 111 illustrations. Per clinic year, February, 1929, to December, 1929, paper, \$12.00; cloth, \$16.00. W. B. Saunders Company, Philadelphia and London, 1929.

STONE AND CALCULOUS DISEASE OF THE URINARY ORGANS. By J. Swift Joly, M.D., F.R.C.S., surgeon to St. Peter's Hospital for Stone; consulting urologist to St. James Hospital, Wandsworth. 567 pages with 189 illustrations in the text and four colored plates. Cloth. Price, \$16.00. The C. V. Mosby Company, St. Louis, 1929.

THE BLOOD PICTURE. Its Clinical Significance, including tropical diseases. A Guidebook on the Microscopy of Blood. By Professor Dr. Victor Schilling, physician-in-chief, the First Medical University Clinic, Charité, Berlin; translated and edited by R. B. H. Gradwohl, M.D., director of the Pasteur Institute of St. Louis, and Gradwohl School of Laboratory Technique, St. Louis. Seventh and Eighth revised edition, with 44 illustrations and four color pages. Cloth. Price \$10.00. The C. V. Mosby Company, St. Louis, 1929.

PETTIBONE'S TEXTBOOK OF PHYSIOLOGICAL CHEMISTRY. Revised and rewritten by J. F. McClendon, Ph. D., Professor of Physiological Chemistry, Medical School, University of Minnesota, Minneapolis. Fourth

edition. 368 pages, illustrated. Cloth. Price \$3.75. The C. V. Mosby Company, St. Louis, 1929.

MODERN METHODS OF TREATMENT. By Logan Clendening, M.D., Professor of Clinical Medicine, Lecturer on Therapeutics, etc. With chapters on special subjects by H. C. Andersson, M.D.; J. B. Cowherd, M.D., H. P. Kuhn, M.D., C. O. Rickter, M.D., F. C. Neff, M.D., E. H. Skinner, M.D., and E. R. DeWeese, M.D. Third edition. 815 pages. The C. V. Mosby Company, St. Louis, 1929. Cloth. Price \$10.00.

TRUTH ABOUT MEDICINES

NEW AND NONOFFICIAL REMEDIES

DANGERS OF LARGE DOSES OF ACETYSALICYLIC ACID.—If large doses of acetylsalicylic acid are to be administered, the urine would have to be watched for evidence of kidney irritation, as albuminuria, hematuria and even actual nephritis may be produced. If albuminuria is present previous to the administration, an increase in the nonprotein blood nitrogen and a lessening in the phenolsulphonphthalein output must be guarded against. Any form of skin eruption, itching, or any degree of gastric irritation would call for reconsidering of such dosage. Also tinnitus and other impairment of nerve function needs to be looked for. (*Jour. A. M. A.*, August 4, 1928, p. 344.)

CONVALESCENT SERUM IN EPIDEMIC POLIOMYELITIS.—The main indication for treatment in this disease is the prevention of paralysis, which is due to the action of the poliomyelitic virus on the nerve cells that preside over movement and nutrition of voluntary muscles. Fortunately there is a period in the evolution of the attack of poliomyelitis during which it may be possible to neutralize the virus before it can develop its maximum destructive effects on the motor nerve cells. There seems to be no question that poliomyelitis can be recognized in this stage. The results obtained from intraspinal and intravenous injections of convalescent serum are encouraging. Theoretical considerations and the results of careful observation appear to justify fully the further trial of convalescent serum in preparalytic poliomyelitis. (*Jour. A. M. A.*, August 11, 1928, p. 398.)

BARBITAL AND RELATED HYPNOTICS.—Many substitutes for barital have been introduced with the claim of greater relative hypnotic action as compared with toxic effects. The toxic action appears to be mainly an intensification of the depression of the central nervous system which in therapeutic doses produces nearly normal sleep; hence their hypnotic activity and their toxicity must run closely parallel, so far as the central nervous system is concerned. An experimental study of a number of hypnotics of the barbitol series on cats showed that none were much more actively hypnotic in proportion to their toxicity than barbitol. Of the five hypnotics examined, none exerted marked analgesic effects with less than thirty per cent of the average fatal dose. None of the hypnotics produced any uniform change in the heart rate or respiratory rate. From this study one does not gain the impression that any of the substitutes possesses all the advantages and none of the disadvantages of the official barbitol. Probably the actual toxicity for man is nearly proportional to the hypnotic action. (*Jour. A. M. A.*, August 11, 1928, p. 398.)

ECLO TABLETS.—Eclo Tablets were found unacceptable for New and Nonofficial Remedies because it was an unoriginal preparation marketed under a proprietary nondescriptive name; because it was marketed with unwarranted claims; and because its vitamin A content was not sufficiently high to warrant recognition. When the Council's observations were submitted to the proprietors, the Pitman-Moore Company, the firm replied that the sale of this product had been discontinued and that

another product prepared by a different process was being marketed. The Pitman-Moore Company has not submitted information in regard to the new product to the Council and the Council has made no examination of it. (*Jour. A. M. A.*, August 18, 1928, p. 515.)

CALCIUM GLUCONATE-SANDOZ.—It contains calcium equivalent to not less than 12.40 or more than 12.80 per cent of calcium oxide. Calcium Gluconate-Sandoz is used to obtain the therapeutic effects of calcium. It is more palatable than calcium chloride and for hypodermic or intramuscular use is non-irritant. It is supplied in the form of a powder and in ampules containing 10 cc. of a ten per cent stabilized supersaturated solution. Sandoz Chemical Works, Inc., New York.

ACNE BACILLUS VACCINE.—An acne bacillus vaccine (New and Nonofficial Remedies, 1929, p. 369) marketed in packages of one 5 cc. vial, and in packages of one 20 cc. vial. Hollister-Stier Laboratories, Spokane, Wash.

PERTUSSIS BACILLUS VACCINE.—A pertussis bacillus vaccine (New and Nonofficial Remedies, 1929, p. 371) composed of several strains of pertussis bacilli, marketed in packages of one 5 cc. vial, and in packages of one 20 cc. vial. Hollister-Stier Laboratories, Spokane, Wash.

STAPHYLOCOCCUS VACCINE (Aureus and Albus).—A staphylococcus vaccine (New and Nonofficial Remedies, 1929, p. 375) prepared from staphylococcus aureus and albus in equal proportions, and marketed in packages of one 5 cc. vial and in packages of one 20 cc. ampule. Hollister-Stier Laboratories, Spokane, Wash.

TYPHOID-PARATYPHOID VACCINE (Prophylactic).—A typhoid vaccine (New and Nonofficial Remedies, 1929, p. 378) consisting of a suspension of killed typhoid, paratyphoid A, and paratyphoid B bacilli. It is marketed in packages of one 5 cc. vial and in packages of one 20 cc. vial. Hollister-Stier Laboratories, Spokane, Wash. (*Jour. A. M. A.*, October 5, 1929, p. 1065).

ATOQUINOL-CIBA.—The allyl ester of 2-phenyl-quinolin-4-carboxylic acid. The actions and uses of Atoquinol-Ciba are practically like those of cinchophen. It is supplied in the form of tablets 0.25 Gm. (4 grains). Ciba Co., Inc., New York. (*Jour. A. M. A.*, October 19, 1929, p. 1223).

CHINIOFON. —SODIUM-IODOXYQUINOLINESULPHONATE.—A mixture prepared from approximately four parts of 7-iodo-8-hydroxy-quinoline-5-sulphonic acid, containing not less than 26.5 per cent of combined iodine, and 1 part of sodium bicarbonate. Chiniofon, which is closely similar to preparations introduced under various proprietary names as wound antiseptics, has been found to be of use in the treatment of amebic dysentery.

BACILLUS ACIDOPHILUS CULTURE-HOLLISTER-STIER.—A pure culture of *B. acidophilus* which contains not less than 150 million viable organisms (*B. acidophilus*) per cc. at the time of issue. For a discussion of the actions, uses and dosage of bacillus acidophilus preparations see Lactic Acid-Producing Organisms and Preparations, New and Nonofficial Remedies, 1929, p. 220. Hollister-Stier Laboratories, Spokane, Wash. (*Jour. A. M. A.*, October 26, 1929, p. 1309).

PROPAGANDA FOR REFORM

ANAYODIN NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that Anayodin was presented by the Ernst Bischoff Co., Inc., with the statement that it was composed of iodoxyquinolin-sulphonic acid with the addition of 22 per cent sodium bicarbonate, and that from the information before the Council it appeared that Anayodin was a mixture prepared from approximately four parts of 7-iodo-8-hydroxy-quinolin-5-sulphonic acid and one part of sodium bicarbonate, which during recent years has been used in the treatment of amebic dysentery while similar preparations under various trade names had before this been proposed as wound antiseptics. The Council informed the Ernst Bischoff Co., Inc., that, since it was not the discoverer

of the preparation, the Council could not recognize a proprietary name for it, but, unless other conflicts appeared, its product would be accepted if marketed as chiniofon which name the Council had adopted for the mixture represented by "Anayodin", if acceptable tests were provided to insure its purity and uniformity and the advertising revised to meet stated objections. Ernst Bischoff Co., Inc., did not make its preparation acceptable and, accordingly, the Council declared "Anayodin" unacceptable for New and Nonofficial Remedies because it is an unoriginal preparation, marketed under a noninforming name without an adequate statement of composition; because no evidence was available to show that its identity and uniformity are adequately controlled; and because it is marketed with therapeutic claims which are unwarranted. (*Jour. A. M. A.*, October 5, 1929, p. 1065.)

BERT SONDERGORD AND THE PEPTONO MEDICAL CO.—Under the trade name "Peptono Medical Co." and under his own name, Bert Sondergord, Cairo, Ill., has been selling a quack remedy for "lost manhood". He has also offered shares in the Peptono Medical Company for sale. Sondergord advertised in the *Police Gazette* and similar sheets. An investigation of the preparations that were being sold and of the stock selling scheme by the post office authorities resulted in the issuance of a fraud order debarring the Peptono Medical Company from the use of the mails. (*Jour. A. M. A.*, October 5, 1929, p. 1082.)

COMMITTEE ON FOODS.—The Council on Pharmacy and Chemistry has established a Committee on Non-medicinal Foods to pass on all food products for which health claims might be made. The Committee has prepared a series of rules under which it proposes to operate and these have been approved by the Council on Pharmacy and Chemistry. Any product which it is desired to have considered for "Accepted Foods" should be presented to the Committee on Foods, American Medical Association, 535 North Dearborn St., Chicago. The rules for the acceptance of foods are patterned on the principles of New and Nonofficial Remedies, with such modifications and relaxations as are made necessary by the different nature of the products concerned. Reports on products considered, having received approval of the Committee, may be published in the *Journal of the American Medical Association* under the section devoted to the Council on Pharmacy and Chemistry with a special heading, "Committee on Foods". At the end of each year, all reports shall be assembled in book form, with the reports of all products accepted preceding the reports of all products rejected. This book shall have the title "Accepted Foods". (*Jour. A. M. A.*, October 12, 1929, p. 1144.)

LIVER EXTRACT No. 343.—The Council publishes a report of the Committee on Pernicious Anemia of the Harvard Medical School. This report states that in May, 1927, the Committee on Pernicious Anemia of the Harvard Medical School was organized to study the properties and to determine the clinical value of the fractions of liver that were being extracted, and to determine in what way a satisfactory product could be made available. Under direction of this Committee, Eli Lilly & Company offered to manufacture one of the extracts developed. The function of the Committee was merely to supervise the production of a suitable extract of known potency until such time as the medical profession should have become accustomed to its use. The treatment of more than one hundred cases of pernicious anemia with this extract indicated that a satisfactory product was available and it was accepted by the Council on Pharmacy and Chemistry for New and Nonofficial Remedies, under the name "Liver Extract No. 343". For the past year, Eli Lilly & Company has regularly produced lots of material, every one of which has been shown to be clinically effective in the treatment of pernicious anemia, by a standardized process approved by the committee. The committee now

feels that its function of developing a reliable commercial product has been accomplished, and that it may therefore cease actively to supervise the manufacturing process. (*Journal A. M. A.*, October 12, 1929, p. 1144).

THE COMMITTEE ON FOODS.—The need of somebody to express judgment of food products and food advertising, in the same way that the Council on Pharmacy and Chemistry considers medical preparations, has become apparent. The Council has therefore created a special committee on foods. The manufacturers of food products, distributors and all others interested in the promotion of natural food substances or of modified foods, for which claims are made in relation to the promotion of good health, will be asked to submit to the committee the products and the advertising material used in advancing their sale. If a product is found acceptable by the committee, advertisements of it will be permitted in the publications of the American Medical Association, the product will be listed in the book on foods similar to New and Nonofficial Remedies, and the manufacturers will be permitted to use a symbol indicating that the product has been accepted by the committee for listing in the book of foods. If the product cannot reach the standards set forth, a report will be published as is done for drug products, and advertising of the preparation will not be permitted in the publications of the American Medical Association. The work of the Committee on Foods should do much to carry still further the message of good hygiene and of scientific medicine. In beginning this work, the Council on Pharmacy and Chemistry again ask the complete support of the medical profession. Only by the sincere cooperation of the medical profession with the committee can it achieve the prestige necessary to complete attainment of its objects. (*Jour. A. M. A.*, October 12, 1929, p. 1147.)

THE ANTIPELLAGRIC VITAMIN.—Evidence has been furnished that the so-called accessory food factor formerly designated as vitamin B and supplied in comparative abundance by yeast apparently contains, in addition to the antineuritic vitamin, a factor which promotes growth and cures and prevents dermatitis in rats; consequently it has been regarded as identical with the "P-P" factor described by Goldberger and others as a curative and preventive of human pellagra. The newest American designation of this is vitamin G—the vitamin B₂ of British biochemists. There is little doubt that both of these water-soluble vitamins are essential to growth and well-being; and it seems reasonably certain that pellagra is due to a vitamin deficiency. It is now known that unheated yeast is rich in both and that certain cereals contain more vitamin B than vitamin G; milk and meat, the reverse. The vitamin G value of wheat and maize is low, as is that of dried legumes such as peas. Meat and egg yolk are richer in vitamin G than are the cereals, while liver and fresh milk are excellent sources of this dietary adjuvant. (*Jour. A. M. A.*, October 12, 1929, p. 1149).

THE W. R. DARLINGTON FRAUD. THE KURO REMEDY COMPANY'S "PILE CURE."—For some years W. R. Darlington, of Kansas City, Mo., has been selling an alleged cure for piles. An investigation by the post office authorities brought out that the preparations sold by Darlington were put up by Parke, Davis & Company at their Kansas City branch. According to Darlington, the ingredients of his "pile treatment" are as follows: Pile Treatment Tablets: Tr. Horse Chestnut, 1 min. R/#S-272690, P. D. & Co.) Compressed Tablets:—Potassium Bitartrate, 4 Gr.; Sulphur Flowers, 7 Gr.; Ext. Cascara Sagrada, 1½ gr. Pile Ointment: (R/#S-287974, P. D. & Co.), F. E. Hamamelis Lvs., 1 fl. oz.; Balsam Peru, 120 gr.; Po Fenugreek, 1 oz.; Wax and Petrolatum, Qs. Because the scheme is one for obtaining money through the mails by false and fraudulent pretenses, the Kuro Remedy Co. and the Kuro Co. were debarred from the use of the mails. (*Jour. A. M. A.*, October 12, 1929, p. 1163).

MIZAR AGAIN.—For a good many years Joseph Sorokowski, Chicago, has been selling nostrums. His chief

nostrum, "Mizar", sold as a remedy for rheumatism in particular, but also recommended for sprains, chilblains, headaches, frost-bite, "ear-sounds", cold in the chest, and asthma, was examined more than five years ago by the A. M. A. Chemical Laboratory, which reported that the product was an ointment having as a base a mixture of soap, petrolatum and a saponifiable fat, with red pepper as the active ingredient. The directions for using Mizar were that it should be rubbed on the parts affected and then a bandage put on. In two or three days an eruption might be expected to appear, which would prove that the rheumatism was "coming out". In addition Sorokowski has been selling "Logos", recommended for amenorrhea and "loss of manly strength", and "Zdrojanka", "an unequalled remedy for headache and hair strengthening." In a prosecution by the government it was brought out that, when analyzed by the federal chemists, Mizar was found to be an ointment containing capsicum, and Logos was found to contain 82 per cent of alcohol with other volatile matter aggregating 93.5 per cent. As the evidence shows that this is a scheme for obtaining money through the mails by means of false and fraudulent pretenses, representations and promises the Postmaster General issued a fraud order against Joseph Sorowski, Z. Joseph Sorokowski, Josef Sorokowski and J. Sorokowski, thus denying the use of the mails for the sale of the nostrums. (*Jour. A. M. A.*, October 19, 1929, p. 1240).

BOROCAINE NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that under the proprietary, nondescriptive name "Borocaine", Sharp & Dohme, Baltimore, market procaine borate, and boric acid salt of the base procaine. The product was placed on the market on the basis of work published by Copeland and Notton, who adopted the name Borocaine to designate the borates of various anesthetic bases with which they experimented and who, according to Sharp & Dohme, gave their approval to the British drug houses to manufacture procaine borate under the title Borocaine. The A. M. A. Chemical Laboratory examined the product marketed as Borocaine and reported that it was the borate of the base procaine—that is, procaine borate. From a study of the literature it was concluded that the procaine borate studied by Copeland and Notton agreed essentially in composition with the procaine borate prepared and described in 1910 by Einhorn and Uhlfelder. Since procaine borate was previously described in the literature, the Council could not recognize the name on the score of novelty, and since neither Sharp & Dohme, the British drug houses nor Copeland and Notton discovered the therapeutic value of procaine or even the properties of procaine when contained in a solution in which ionization of the procaine salt does not occur, the Council could not recognize the name Borocaine under the clause which permits the recognition of a proprietary name for a previously known substance discovered to have therapeutic value. The Council therefore declared "Borocaine" unacceptable for New and Nonofficial Remedies because the application of a proprietary name to procaine borate is considered not to be in the interest of rational therapy. (*Jour. A. M. A.*, October 26, 1929, p. 1309).

CASCARA-AGAR NOT ACCEPTABLE FOR N. N. R.—The Council on Pharmacy and Chemistry reports that, under the name "Cascara-Agar" the Reinschild Chemical Company markets a preparation stated to contain "15 per cent of a watery percolation of two-year-old cascara bark, which is processed into No. 1 Agar, cut to size" and is recommended for use in constipation. It is stated on the trade package that the preparation is: "A harmless vegetable addition to breakfast food. Each teaspoonful contains a mild and specially prepared solution of Cascara Tea". Since no statement as to the amount of cascara contained in the product was given, the firm was asked to make a plain statement of the constituents of the product. The firm replied giving the method of preparation of the product. However, since no details

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TRUTH ABOUT MEDICINES

(Continued from page 552)

were given as to the method used to "debitter" the cascara, one cannot say how much of the active principle of cascara was lost in the process of preparation and therefore the amount of cascara in a given quantity of the finished product cannot be judged. Experiments carried out lead to the conclusion that "Cascara-Agar" contains at most only a trace of cascara, and that it is misleading to call the preparation "cascara-agar". Information was received that the Reinschild Chemical Company still markets "Regulin", a product which has been stated to be prepared in the same manner as is "Cascara-Agar". Since the Council does not accept an article under one name if an essentially similar product is marketed by the same firm under another name, this makes "Cascara-Agar" further objectionable. The Council declared "Cascara-Agar" unacceptable because it is an indefinite mixture marketed under a misleading name with unwarranted therapeutic claims, and because an essentially similar product is marketed by the same firm under another name. (*Jour. A. M. A.*, October 26, 1929, p. 1309).

ABSTRACTS

LOBAR PNEUMONIA COMPLICATED BY BLEEDING GASTRIC EROSIONS

Philip Rosenblum and Benjamin M. Gasul, Chicago (*Journal A. M. A.*, June 22, 1929), report the case of a child, aged eight years, coming to the hospital because of pain in the abdomen of four days' duration, vomiting of blood, and bloody stools of one day's duration. The patient had been apparently well until six days before,

when she was awakened from her sleep and started vomiting. The vomitus then consisted of the food eaten. The next day the child remained in bed and her skin felt hot. She was very restless all that night and was continually asking for water. On the next day the child complained of pain in the abdomen. A physician was then called and he ordered ice packs to the abdomen and gave some medicine. The child kept getting worse. Pain in the abdomen continued, the patient always pointing to the region above the umbilicus. Vomiting of blood material occurred twice on the day of entrance, and tarry black stools appeared for the first time just before entrance. Stools had been passed once daily for the past five days but no blood was noticed until the day of examination. There had not been any cough, chills, dysuria or hematuria. The authors' diagnosis was a left lower lobe pneumonia and a melena probably due to a hemorrhage from the upper gastro-intestinal tract, possibly from a peptic ulcer. The patient's blood typed with the father's showed coagulation of the donor's red blood cells. One-sixteenth grain (4 mg.) of morphine sulphate was given hypodermically, followed by a 10 cc. intramuscular injection of thromboplastin. Father's whole blood was given intramuscularly at two hourly intervals until a total of 210 cc. had been given. The patient was also given 800 cc. of physiologic solution of sodium chloride. Her condition, however, became more critical, and she died fifteen hours after entrance. The autopsy revealed a lobar pneumonia of the left pulmonary lobe; several hemorrhagic gastric erosions; a blood-filled gastro-intestinal tract; slight bilateral pulmonary edema; cloudy swelling of the parenchymatous organs, and marked hyperplasia of the trachea and bronchial lymph glands. The blood culture showed a gram-positive diplococcus, *Diplococcus pneumoniae*. Microscopically, lobar pneumonia and acute erosions of the stomach were observed.



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